SERVICE MANUAL

AEP Model

Chassis No. SCC-B14H-A



AE-1 CHASSIS

Note: The service manuals for RM-673 have been issued separately.

MODELS OF THE SAME SERIES				
KV-X25TD	KV-X21TD			
KV-25XSD	KV-21XSD			
KV-25XSTD	KV-21XSTD			

SPECIFICATIONS

Television system

Color system

Stereo system

Channel coverage

CCIR B, G and H PAL SECAM

German two carrier system VHF channels E2-E12

UHF channels E21-E69 Cable TV channels S1-S20

(a total of up to 30 preselected channels)

Picture tube

Trinitron tube

110-degree deflection

Approx. 63.5cm (25 inches) (Approx. 59cm picture measured diagonally)

21-pin connector: CENELEC standard

Outputs

Inputs

21-pin connector: RGB input unconnected

Headphones jack: stereo minijack External speaker terminals: 2-pin DIN

Audio output jack: phonojack output level dependent

upon TV setting

Power consumption

98Wh

Dimensions Approx. $587 \times 522 \times 460 \text{mm}$ (w/h/d)

Weight

Approx. 35.5kg

Supplied accessories

RM-673 Remote Commander (1)

IEC designation R6 batteries (2)

Sound output

10W+10W (music power)

Design and specifications are subject to change without notice.





TABLE OF CONTENTS

Section	<u>Title</u>	Page	Section	Title	Page
1-2. Connection 1-3. Function 1-4. Viewing 1-4. Viewing 2. DISASSEMBL 2-1. Rear (2-2. Chassis 2-3. J1, A 2-4. KS an 2-5. Picture	Cover Removal······s Assy Removal····· V Boards····· d B Boards Removal ··· Tube Removal··· Position·····		5-2. Circui 5-3. Schem 5-4. Printe Schem Printe Schem Printe 5-5. Semico	Diagram t Boards Location tatic Diagram (1) d Wiring Boards (1) d Wiring Boards (2) d Wiring Boards (2) d Wiring Boards (3) d Wiring Boards (3) d Wiring Boards (3) forductors	
3-1. Beam $3-2$. Conver $3-3$. Focus	Landinggence	12	7. ELECTRICAL	PARTS LIST	49
4-2. D Boa 4-3. A Boa 4-4. J1 Boa 4-5. V Boa	rd Adjustmentsrd Adjustmentsrd Adjustmentsrd Adjustmentsrd Adjustmentsrd Adjustmentsrd Adjustmentsrd Adjustments	······17 ·····17 ·····18 ····18			

SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY SHADING AND MARK

ON THE SCHEMATIC DIAGRAMS, EXPLODED
VIEWS AND IN THE PARTS LIST ARE CRITICAL TO
SAFE OPERATION. REPLACE THESE COMPONENTS
WITH SONY PARTS WHOSE PART NUMBERS APPEAR
AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS
PUBLISHED BY SONY.

SECTION 1 GENERAL

Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

1-1. FIRST OF ALL

- Connect the aerial to the T socket on the rear of the This socket receives the standard 75-ohm aerial plug.
- 2 Plug in the set.
- 3 Tune in the available channels.

Use the buttons inside the front panel. To open the panel, press the center.

To tune in all channels automatically:

- Press ⊕ (Preset)
- Press PROGR to select the program position from which tuning is to start.
- Press (Auto programing).

The channels will be tuned in and memorized in consecutive positions, beginning from the program position selected in

When tuning has been completed, the set returns to the position where tuning began.

To tune in a channel in any desired program position.

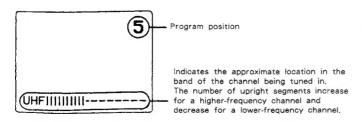
- (e. g. the position with the same number as the channel):
- Press +> (Preset).
- Press PROGR to select the desired program position.
 Press C (Clear).
- Press (Search) repeatedly until the desired channel appears.
- 5 Repeat steps 2 to 4 for all channels, if required.
- Press \odot (Preset) again.

If the set is to be used in an area with poor reception, preset the program numbers between 1 and 19 for TV program use.

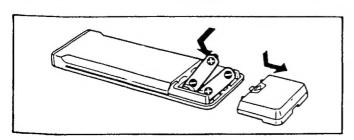
To have the unused program positions skipped when PROGR+ or PROGR− is pressed 1 Press ♦ (Preset).

- Press PROGR to select the unused position.
- Press C (Clear).
- Repeat steps 2 and 3 for all unused position.
- Press \Leftrightarrow (Preset) again.

On-screen display while tuning

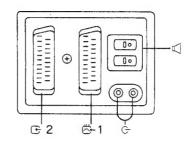


Insert two R6 batteries checking the correct polarity.



1-2. CONNECTING OTHER EQUIPMENT

connectors on rear set



L·G/S	Left external speaker terminal (2-pin DIN)	Connect to external speakers. The TV speakers will be disconnected.	
R/D/D	Right external speaker terminal (2-pin DIN)	Speaker 8-16Ω.	
R/D/D	Right audio output jack (Phono jack)	Connect to audio equipment. When only using the phono- jack, two loudspeaker plugs, (OIN 41529) should be inserted	
L/G/S	Left audio output jack (Phono jack)	into the external speaker terminals so that the TV speaker output is switched off.	
Ö -1	21-pin connecter (CENELEC standard)	Connect to a VTR micro computer, etc.	
		The picture of the TV channel being received is always output. The picture of ⊕ 2 can be watched while recording a TV program with the VTR connected to ⊕1.	
Œ 2	21—pin connecter (without RGB inout)	Connected to a second VTR. The picture displayed on the screen is always output. The picture of E-1 can be recorded with the VTR connected to E-2 while monitoring the picture.	

VTR operation using the supplied Commander Remote operation of the VTR (8mm only) is limited to the features and functions of the VTR. For further details, refer to the VTR manual. When watching a video with the VTR connected to the connector, set the channel for the video to the program number 0 or any empty channel between 20 and 29.

Move the VTR away from the TV, if the picture or sound is distorted.

21 Pin Connector (☐-1, ☐- 2)

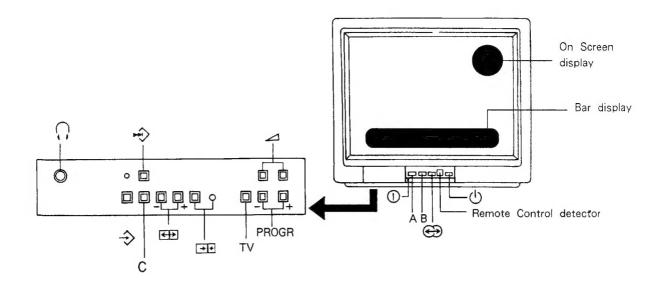
Pin No	1	2	Signal	Signal level	
1	0	0	Audio output B (right)	Standard level: 0.5 Vrms Output impedance: Less than 1 k ohm*	
2	0	0	Audio input B (right)	Standard level: 0.5 Vrms Input impedance: More than 10 k ohms*	
3	0	0	Audio output A (left)	Standard level: 0.5 Vrms Output impedance: Less than 1 k ohm*	
4	0	0	Ground (audio)		
5	0	0	Ground (blue)		
6	0	0	Audio input A (left)	Standard level: 0.5 Vrms Input impedance: More than 10 k ohms*	
7	0	•	Blue input	0.7 V ±2 dB, 75 ohms, positive	
8	0	0	Function select (AV control)	High state (9.5-12 V): Part mode Low state (0-2 V): TV mode Input impedance: More than 10 k ohms Input capacitance: Less than 2 nF	
9	0	0	Ground (green)		
10	0	0	Open		
11	0	•	Green/Green with sync input Green signal: 0.7 V ±2 dB, 75 ohms, positive Green with sync signal: 1 V ±2 dB, 75 ohms, positive		
12	0	0	Open		
13	0	0	Ground (red)		
14	0	0	Ground (blanking)		
15	0	•	Red input (Same as Pin 7)		
16	0	•	Blanking input (Ys signal)	High state (1-3 V) Low state (0-0.4 V) Input impedance : 75 ohmes	
17	0	0	Ground (video output)		
18	0	0	Ground (video input)		
19	0	0	Video output	1 V ±2 dB, 75 ohms, positive Sync: 0.3 V (-3, ±10 dB)	
20	0	0	Video input	1 V ±2 dB, 75 ohms, positive Sync: 0.3 V (-3, ±10 dB)	
21	0	0	Common ground (plug, shield)		

O connected

• unconnected (open)

* at 20 Hz-20 kHz

1-3. FUNCTION OF CONTROLS



On the set

On-screen display

Indicates program numbers and G input modes.

Bar display

Indicates the level of \triangle volume, 3 color, 5 brightness, 3 contrast, 9: bass, 4 treble and \trianglerighteq balance.

Note on \searrow function.

When the volume is at the minimum setting the balance and function will not operate.

① Power switch

To cut off the mains power completely, press this switch. Depress the power switch fully to ensure correct operation of the set.

Note

To ensure correct operation, push the switch in fully.

(1) standby indicator

Lights up brightly when the set is in the standby mode.

Note

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

ng space sound indicator

Lights up when @ on the Remote Commander is pressed.

A/B indicators

One of them lights during bilingual broadcast. (Choose A or B with the Remote Commander.)

Both light during stereo broadcast. In AV mode, A lights for left channel, B for right channel, or A and B for both channels.

Remote control detector

Point the Remote Commander towards this detector.

Inside the panel

∩ headphones jack (stereo minijack)

Press to fine tune a weak channel manually, if required. When \boxdot (SEARCH) pressed, the \boxdot indicator (AFT) goes off and the AFT cricuit does not function on the selected channel.

To restore the AFT circuit on this channel, press (AFT) so that the indicator lights up.

→ AFT button and indicator

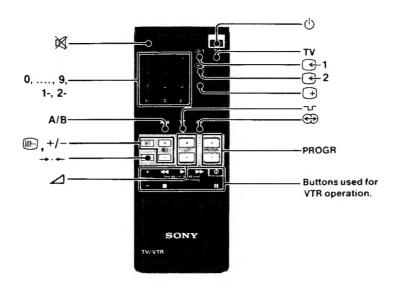
Normally, press I (AFT) so that the indicator lights up.

The AFT circuit automatically fine tunes the charnel for the best possible picture.

∠ volume buttons

PROGR+, PROGR- program scan buttons

FUNCTION OF CONTROLS



On the Remote Commander

To operate the Commander, point it toward the remote control detector.

M mute button

0,, 9, 1-, 2- buttons

To tune into: program 15, press 1- and 5 program 25, press 2- and 5

Press to select the language in a bilingual broadcast, or to select the channel in AV mode.

⊕ +/-analog select buttons

Press ®

will appear on the screen. Adjust by pressing + or −.
Press ⊕ again and adjust ③ (color), then ☼ (brightness),
(bass), ∮ (treble) and ∠ (balance).

→ · ← reset button

Press to reset color and contrast and brightness to factoryset levels.

(b) standby button

Press to change to the standby mode. Use this button to

turn off the set for short periods of time.
To turn on the set, press TV or the program number; there will be a slight delay before the picture is restored.

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

Press to change to the TV mode from the standby or G input modes.

⊕ 1 input button

Press to view the input picture coming in through the -1

Press to view the input picture coming in through the G 2

on-screen display button.

Press to make the display appear on the screen. Press again to make them disappear.

ਾ loudness button

Press to emphasize high and low notes.

@ space sound button

Press to obtain special acoustic effects.

∠ volume buttons

PROGR program scan buttons

Note

Buttons not referred to on this page or next page do not operate.

1-4. VIEWING TELETEXT

To view the teletext service, use the Remote Commander. The buttons for teletext operation are indicated in green.

Operation

- Select the TV channel for the desired teletext service.
- Press ■/② (TEXT/MIX) to display the teletext service.

Once 1 / D has been pressed, the TV channel cannot be changed.

Key in the three digits for the desired page using the number buttons. If an error is made, complete the three digit sequence by keying in any digit. Then re-enter the correct page number. The requested teletext page is displayed.

To return to the TV mode, press TV on the remote commander.

The teletxet service can be displayed directly from the standby mode, by pressing 1 /2.

To receive the teletext service of a different TV channel.

- Press TV to return to the TV mode.
- Select the desired TV channel. Press 🗉 🖊

Note

To receive the teletext service accurately, keep 38 inside the panel switched on during teletext

To display the index page.

Press (INDEX).

If the necessary signal is not being broadcast, page 100 is displayed.

To rapidly access the next or preceding page press (PAGE+) or (PAGE-).

To superimpose the teletext display on the TV picture. Press 🖹 / 🕏 twice from TV mode.
Press again to return to the TEXT display.

To suppress the teletext display so that the TV picture is displayed.

Press (TEXT CL).

This button can be operated from both the TEXT and MIX displays.

To prevent a teletext page (subpage) from being updated /changed.

Press B HOLD. The HOLD symbol appears at the top of the screen.



To resume normal teletext reception, press 🖹 / 🗗.

To enlarge the teletext display.

Press @ .

Press once to enlarge the upper half of the display; press again to enlarge the lower half of the display; press again to return to the normal display.

To reveal concealed infomation such as the answers to a quiz

Press (REVEAL)

Press again to conceal the answers.

To adjust the contrast of the teletext display, When in teletext mode, adjust by using the + or -keys adjacent to the E key.

To watch the TV program while waiting for a requested page to be displayed.

Request new page.

Press 19 to watch the TV program.

The requested page number appears at the top left of the screen.

When the requested page has been captured, the page number is desplayed in the top left hand corner of the screen.



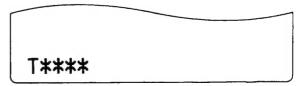
To view this page, press \$\exists \mathcal{Z}\$.

To have a requested page displayed at a predetermined time.

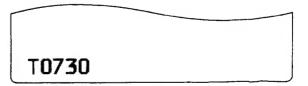
- Request a time coded page (e. g. alarm page).

Press (TP ON).

"T*** will appear at the bottom of the screen.



Enter your request time with the number buttons, using four digits. For example, 07:30.



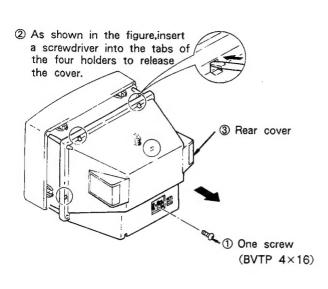
To watch the TV program until the requested time, press . At the requested time, the page number will be displayed at the botton of the screen.

To view this page, press ቜ / ②.

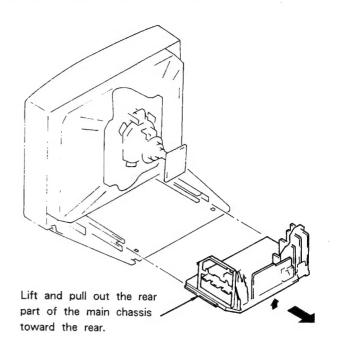
To cancel the request, first ensure that the telebxt page is displayed, then press (TP OFF).

SECTION 2 DISASSEMBLY

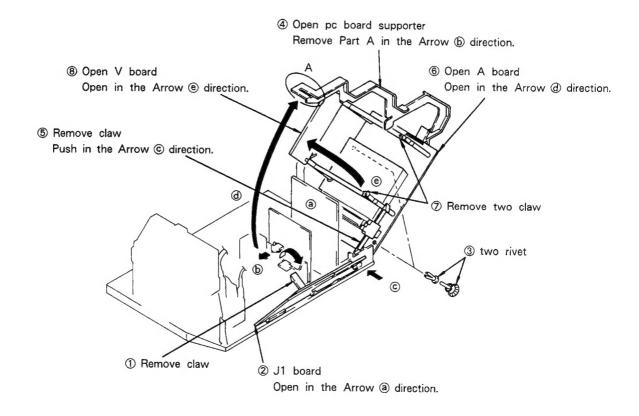
2-1. REAR COVER REMOVAL



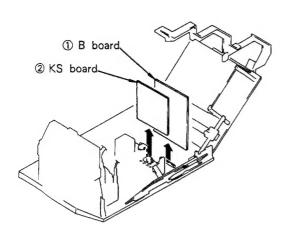
2-2. CHASSIS ASSY REMOVAL



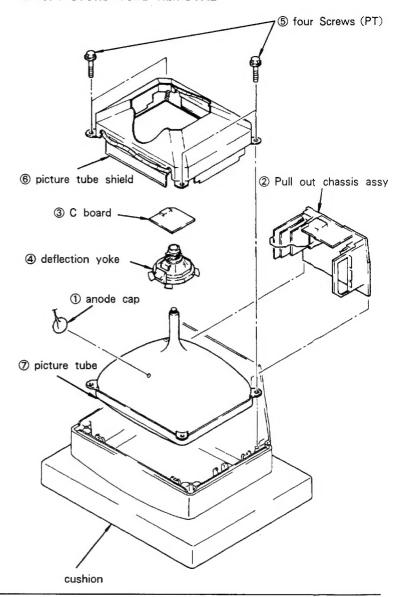
2-3. J1,A, AND V BOARD REMOVAL



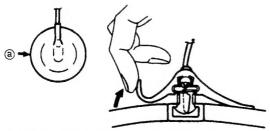
2-4. KS AND B BOARDS REMOVAL



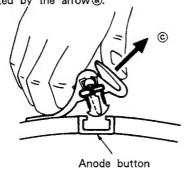
2-5. PICTURE TUBE REMOVAL

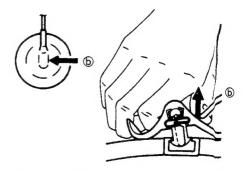


Removing Procedures



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.

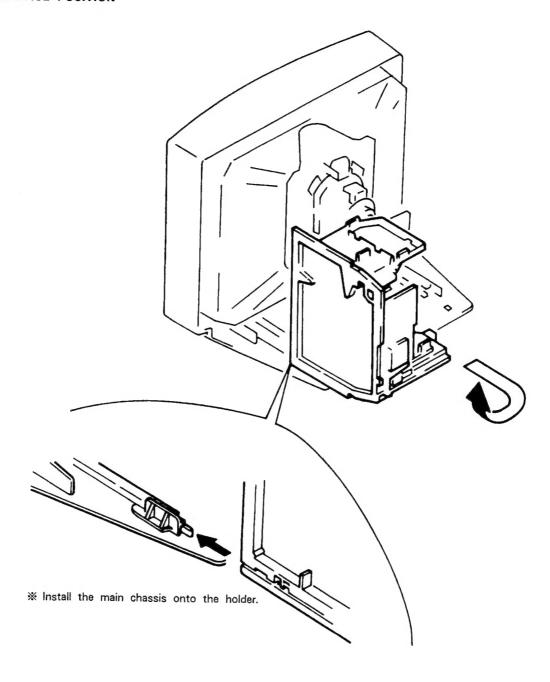




- ② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow **(b)**.
- ③ When one side of the rubber cap is separa

 from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow €

2-6. SERVICE POSITION



SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when
 a complete realignment is required or a new
 picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The control and switch below should be set as follows unless otherwise noted:

◆ CONTRAST control ······· 80% (or Normal by Commander)

☆ BRIGHTNESS control ··· 50%

Perform the adjustments in order as follows:

- 1. Beam Landing
- 2. Convergence
- 3. Focus
- 4. White Balance

Note: Test Equipment Required.

- 1. Color Bar/Pattern Generator
- 2. Degausser
- 3. DC Power Supply
- 4. Digital multimeter
- 5. Oscilloscope

3-1. BEAM LANDING

- Input a raster signal with the pattern generator.
 CONTRAST BRIGHTNESS normal
- 2. Turn the raster signal of the pattern generator to red
- Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides, evenly.

(Fig.
$$3-1 \sim 3-3$$
)

- Move the deflection yoke forward, and adjust so that the entire screen becomes red.(Fig. 3-1)
- 5. Switch over the raster signal to blue and green and confirm the condition,
- When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
- 7. When landing at the corners is not right, adjust by using the magent, (Fig. 3-4)

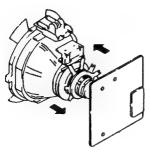


Fig.3-1

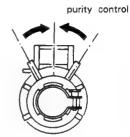


Fig.3-2

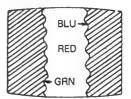
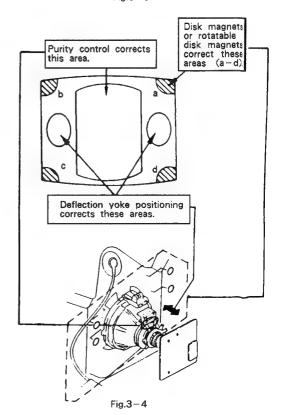


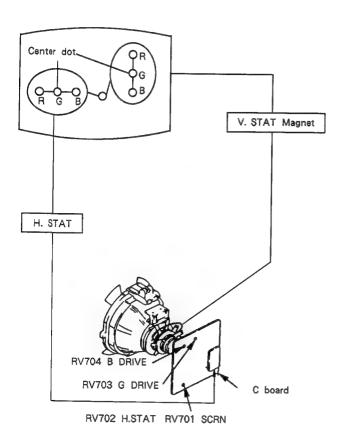
Fig.3-3



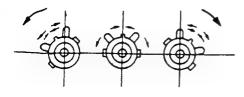
3-2. CONVERGENCE

Preparation:

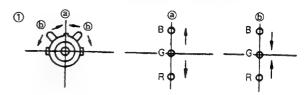
- Before starting, perform FOCUS, H. SIZE and V. SIZE adjustments,
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.
- (1) Horizontal and Vertical Static Convergence

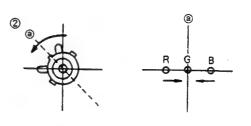


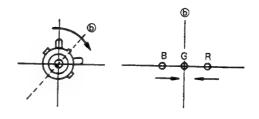
- Adjust H, STAT VR to coincide red, green and blue dots on the center of screen. (Horizontal movement)
- Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen, (Vertical movement)
- If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.

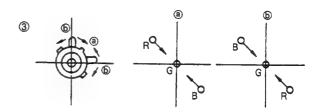


4. When the V. STAT magnet is moved in the direction of arrow (a) and (b), red, green and blue dots move as shown below.

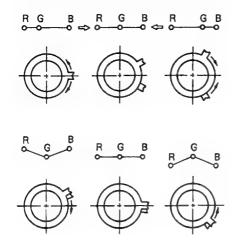






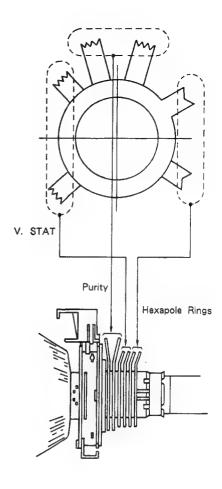


Operation of Hexapole Ringed Magnet



The respective dot operations resulting from the operation of each magnet are not completely independent, so be sure to perform adjustment while tracking.

Use the H. STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).

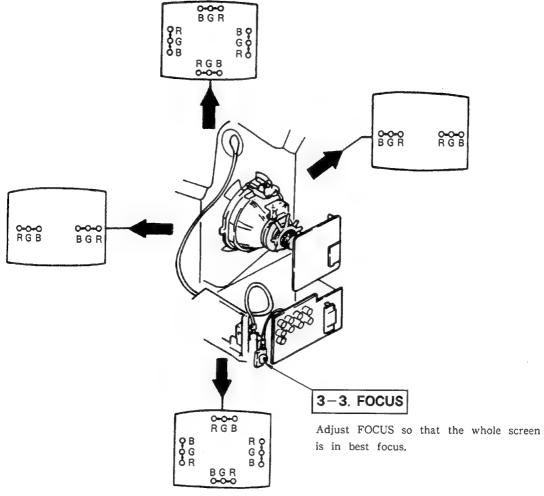


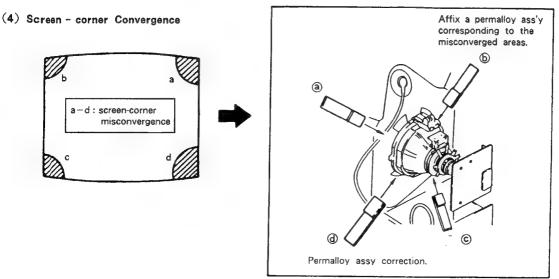
(3) Dynamic Convergence Adjustment

Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment...
- 1. Slightly loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.

- Move the deflection yoke for best convergence as shown below,
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.





3-4. WHITE BALANCE

(Screen (G2) Setting)

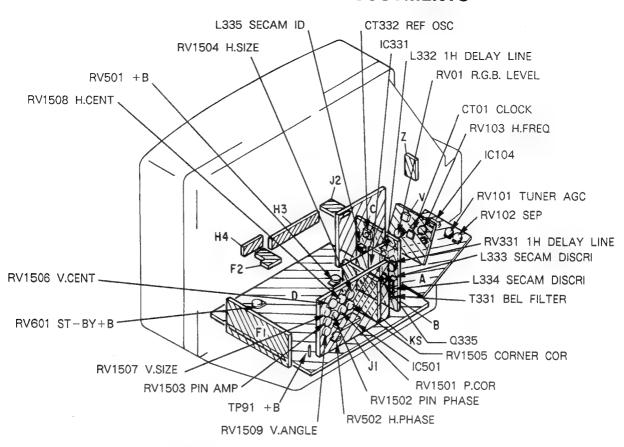
- 1. Input dot signals from the pattern generator.
- Set the picture BRIGHTNESS control to the minimum level,
- 3. Apply 170 V dc to the cathodes of R, G, and B from an external power source.
- While watching the picture, adjust the G2 volume (RV701) immediately before the fly-back line disappears.

(White Balance Adjustment)

- 1. Input all-white signals from the pattern generator,
- 2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
- Adjust the white balance using RV704 (B DRIVE) and RV703 (G DRIVE).

In the following adjustments, the CONTRAST COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

SECTION 4 CIRCUIT ADJUSTMENTS



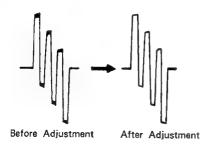
4-1. B BOARD ADJUSTMENTS

REF OSC Adjustment (CT332)

- 1. Input a PAL COLOR BAR pattern.
- 2. Short circuit between pin @ of IC331 and ground.
- 3. Adjust CT332 to obtain color synchronization.
- 4. Remove a jumper wire from IC331.

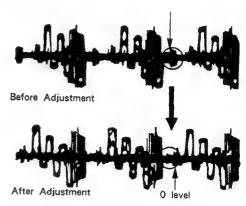
1H DELAY LINE Adjustment (L332, RV331)

- 1. Input a PAL COLOR BAR pattern.
- 2. Connect the oscilloscope to pin ③ (B-Y) of IC331 and observe the waveform of the H block on the oscilloscope.
- Adjust L332 to minimize the double waveform outline,



- 4. Input a PAL TEST COLOR BAR pattern.
- 5. Rotate the RV331 control and adjust till the ANT PAL of the waveform matches the 0 level.

This part matches the 0 level.



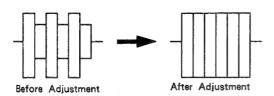
L332 and RV331 affect each other. Repeat till the conditions of both meet.

SECAM ID Adjustment (L335)

- 1. Input SECAM COLOR BAR signal.
- 2. Connect a Digital Multi meter at pin 2 of IC331.
- Adjust L335 so that the indicater goes up to the maximum.

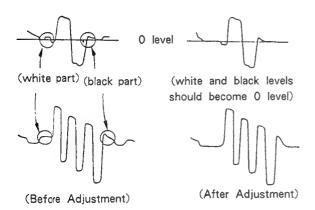
BELL FILTER Adjustment (T331)

- 1. Input SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope to the emitter of Q335.
- Adjust T331 so that the waveform becomes flat.



SECAM DISCRI Adjustment (L333, L334)

- 1. Input SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope at pin 1 of IC331.
- Adjust L333 so that white and black part of the waveform of pin ① becomes 0 level.
- 4. Connect an oscilloscope at pin 3 of IC331.
- 5. Adjust L334 so that white and black part of the waveform of pin 3 becomes 0 level.



4-2 D BOARD ADJUSTMENTS

+B Adjustment (RV501)

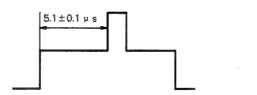
- 1. Connect a Digital Multimeter to TP91.
- 2. Adjust RV501 so that the voltage becomes 135 ± 0.2 V.

ST-BY +B Adjustment (RV601)

- 1. Set up & standby (Remote Commander) mode,
- 2. Connect the digital multimeter to TP91.
- 3. Adjust RV601 so that the voltage becomes 135 ± 3 V.
- 4. Release the 🖰 standby (Remote Commander) mode.

H. PHASE Adjustment (RV502)

- 1. Input the PAL TEST COLOR BAR pattern.
- Set the CONTRAST and BRIGHTNESS controls to the standard positions,
- Set RV1508 (H, CENT) to the mechanical center position,
- Connect an oscilloscope to pin (I) (SPC OUT) of IC501.
- 5. Rotate RV502 and adjust Block T to $5.1\pm0.1\,\mu$ s.



4-3. A BOARD ADJUSTMENTS

TUNER AGC Adjustment (RV101)

- 1. Tune in an off-air signal.
- Adjust RV101 so that snow-noise and crossmodulation just disappear from the picture,

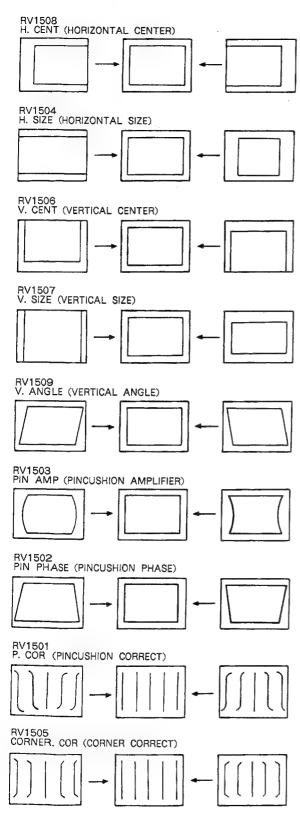
STEREO SEPARATION Adjustment (RV102)

- 1. Input stereo signal (L-CH 1kHz, R-CH 400Hz)
- 2. Check the stereo indicator.
- Connect an oscilloscope to the pin ① (L) of CNA11 through band pass filter of lkHz,
- Adjust RV102 so that 1kHz voltage goes down to the minimum.

H. FREQ. Adjustment (RV103)

- 1. Input PAL COLOR pattern.
- 2. Short circuit between pin @ of IC104 and ground,
- 3. Connect a frequency counter to the pin 6 of IC104 through a probe of 10:1.
- 4. Adjust RV103 so that H. frequency becomes 15.625 ± 50 Hz.

4-4. J1 BOARD ADJUSTMENTS



4-5. V BOARD ADJUSTMENTS

Clock Adjustment (CT01)

- 1. Disconnect the V-1 connector.
- 2. Set up the TELE TEXT mode.
- 3. Adjust CT01 to stop pictures from scrolling.

RGB Level Adjustment (RV01)

- 1. Set PICTURE to maximum.
- 2. Adjust RV01 till the RGB output becomes 0.65V.

4-6. SUB ADJUSTMENTS

SUB BRIGHTNESS Adjustment

- 1. Receive and display a TEST COLOR BAR pattern,
- Push → ← on the remote commander to invoke the normal state.
- 3. Turn off the power supply.
- 4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
- 5. Reduce the ① CONTRAST to the minimum level.
- 6. Adjust the ☆ BRIGHTNESS control until the 0 IRE of the gray scale becomes completely cut off, and the 20 IRE becomes barely luminous.
- 7. Push the AFT button.(SUB mode is cleared)

Where no TEST COLOR BAR pattern is available.

- 1. Display a COLOR BAR pattern.
- 2. Push → ← on the remote commander to invoke the normal state.
 - Set the ③ COLOR to normal mode.

Steps $3\sim5$ are the same as above.

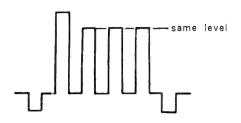
- 6. 20 IRE is close to blue, so adjust the

 ☼ BRIGHTNESS control till blue is faintly luminous.
- 7. Same as Step 7 above.
- Push → ← on the remote commander to invoke the normal state.
- * When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S is displayed only for 30 seconds, perform the adjustment within 30 seconds, or repeat from Step 4.

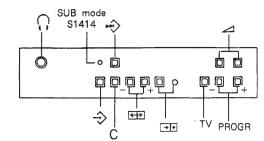
SECTION 5 DIAGRAMS

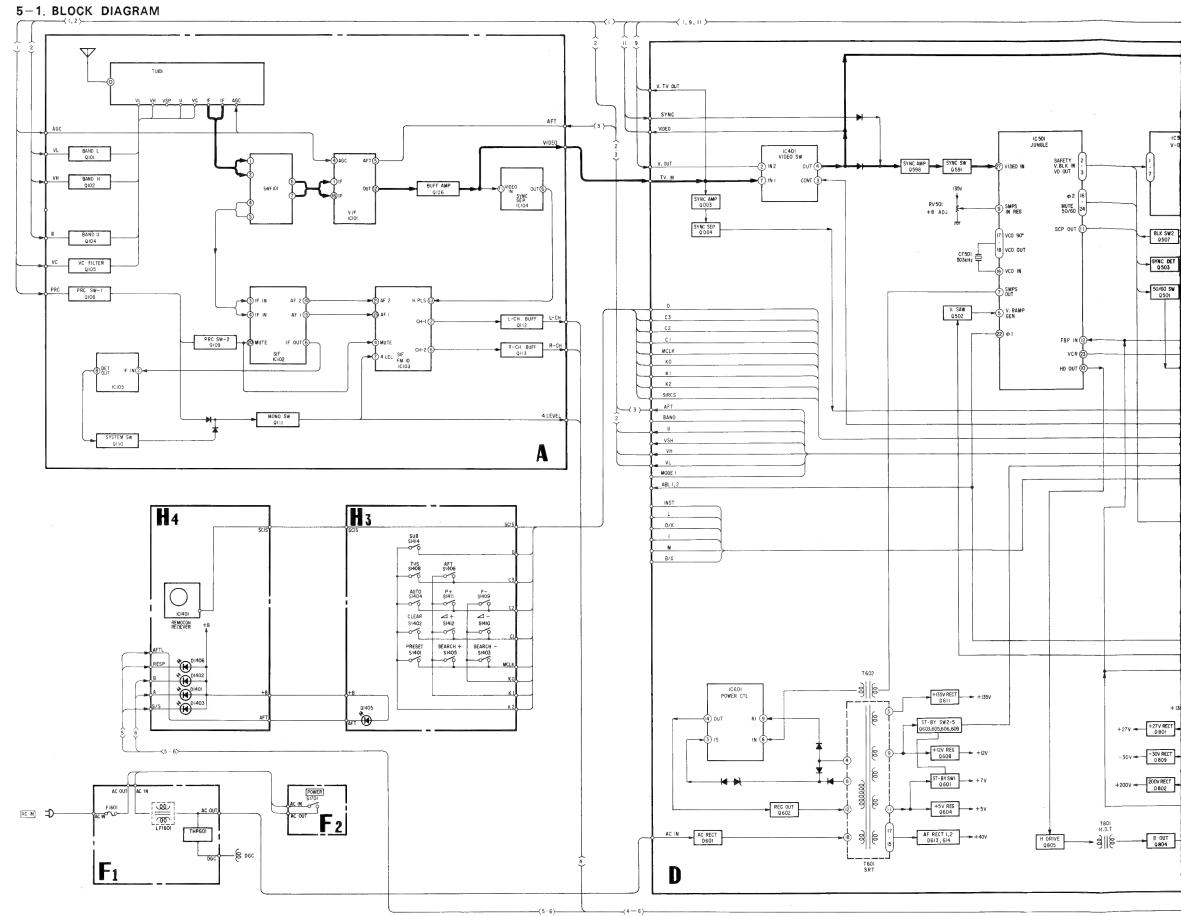
SUB COLOR Adjustment

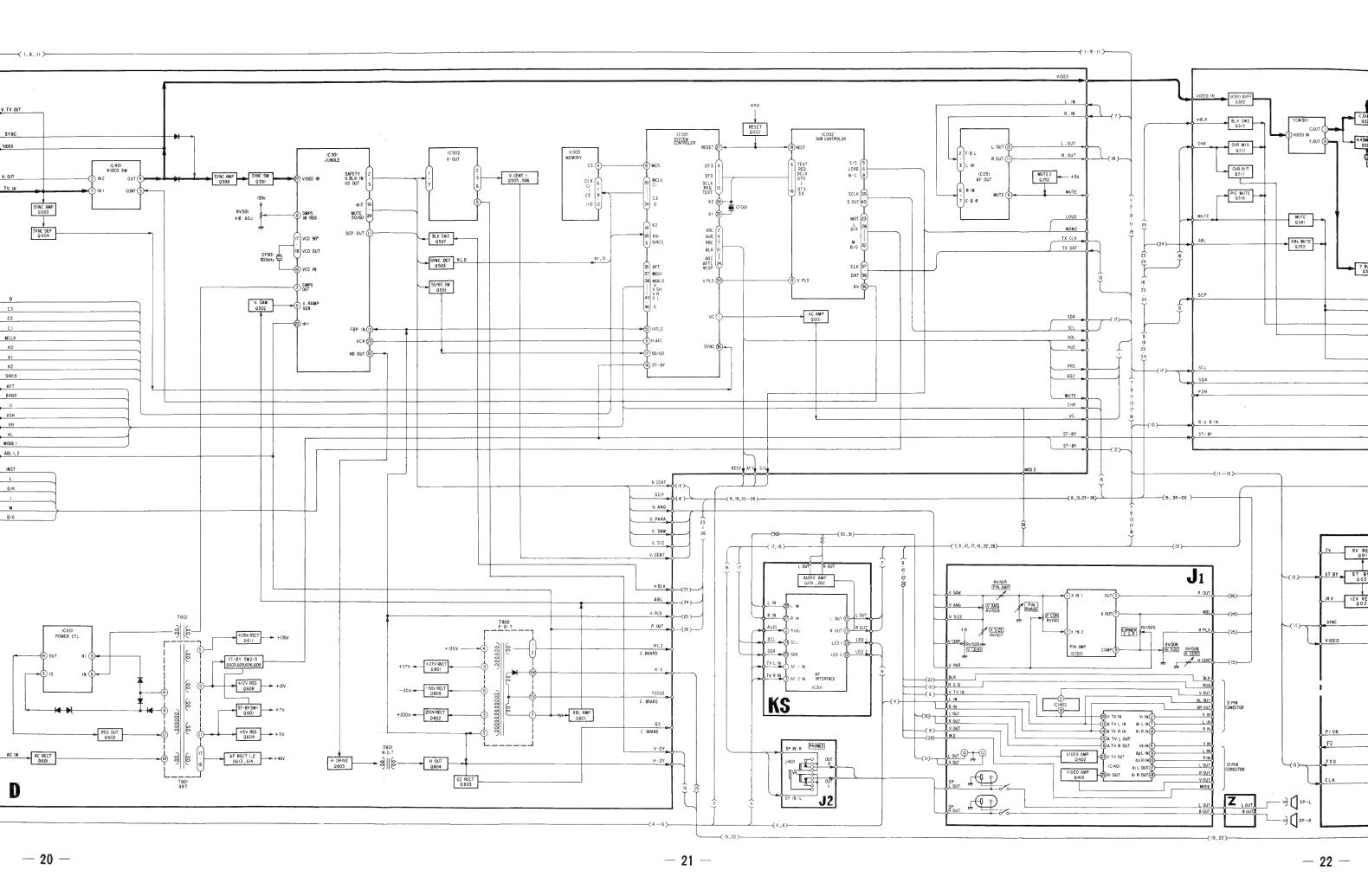
- 1. Display a COLOR BAR pattern.
- 2. Push → ← on the remote commander to invoke the normal state.
- 3. Turn off the power supply.
- 4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
- 5. Adjust the COLOR control until the B out (pin ② of CNC72 connector on C board) waveform becomes as shown below.
- 6. Push the AFT button.(SUB mode is cleared.)

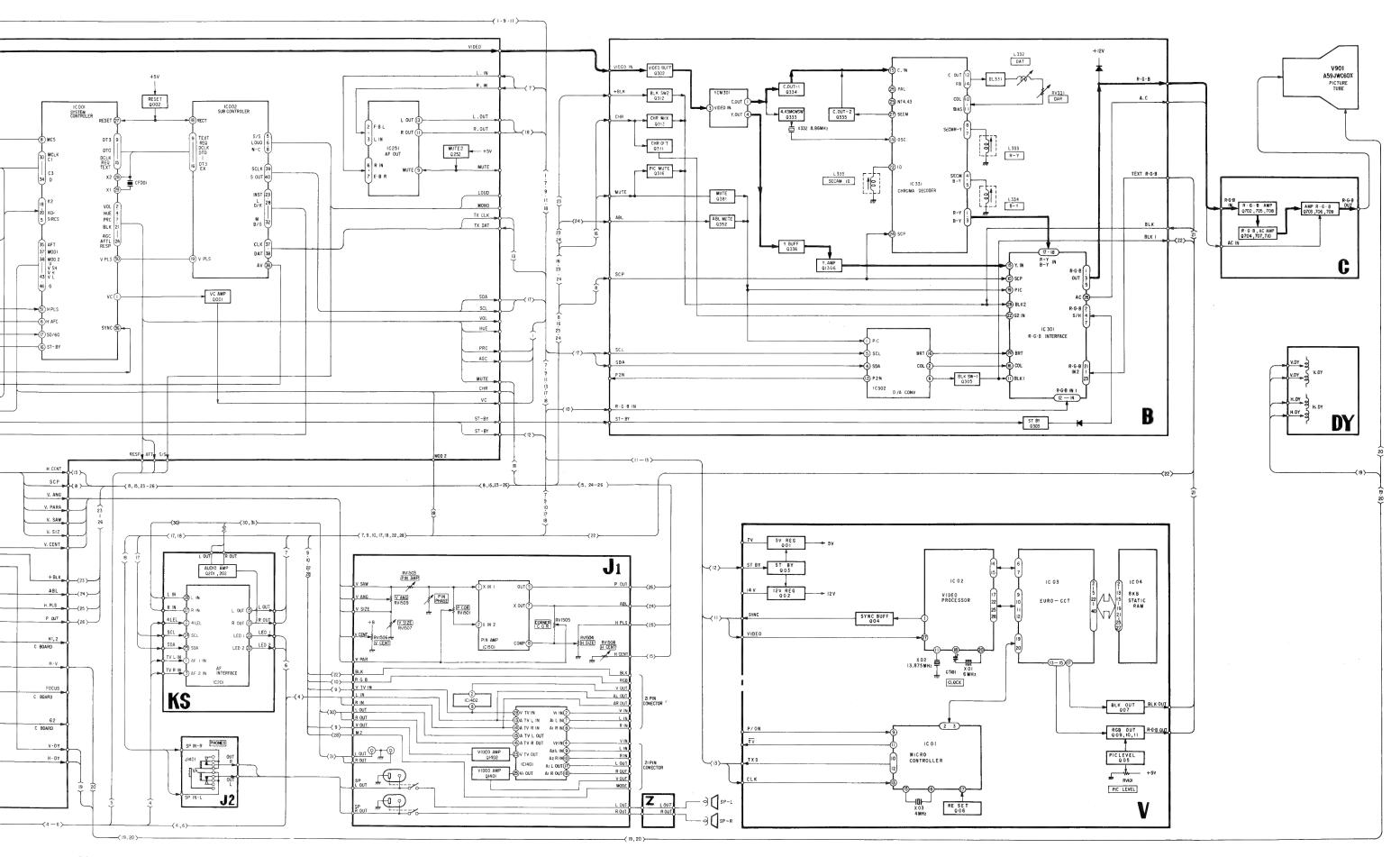


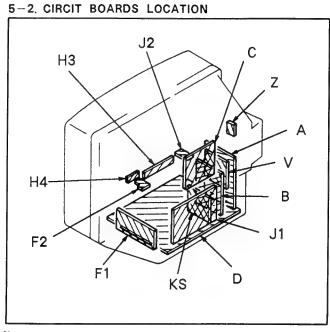
* When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S (SUB mode) is displayed only for 30 seconds, perform the adjustment with 30 seconds, or repeat from Step 4.











Not

- All capacitors are in μF unless otherwise noted, pF:μμF
 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power is as follows.

Pitch : 5mm Rating electrical power : 1/4W

- All resistors are in ohms.
- : nonflammable resistor.
- △ : internal component.
- panel designation.
- All variable and adjustable resistors have characteristic curve B,unless otherwise noted.
- All voltages are in V.
- \bullet Readings are taken with a 10M Ω digital multimeter.
- Readings are taken with a PAL color-bar signal input.
- adjustment for repair.
- Voltage variations may be noted due to normal production tolerances.
- : B+lain
- = = : B-lain • : signal path.

RESISTOR

Reference information

: RN

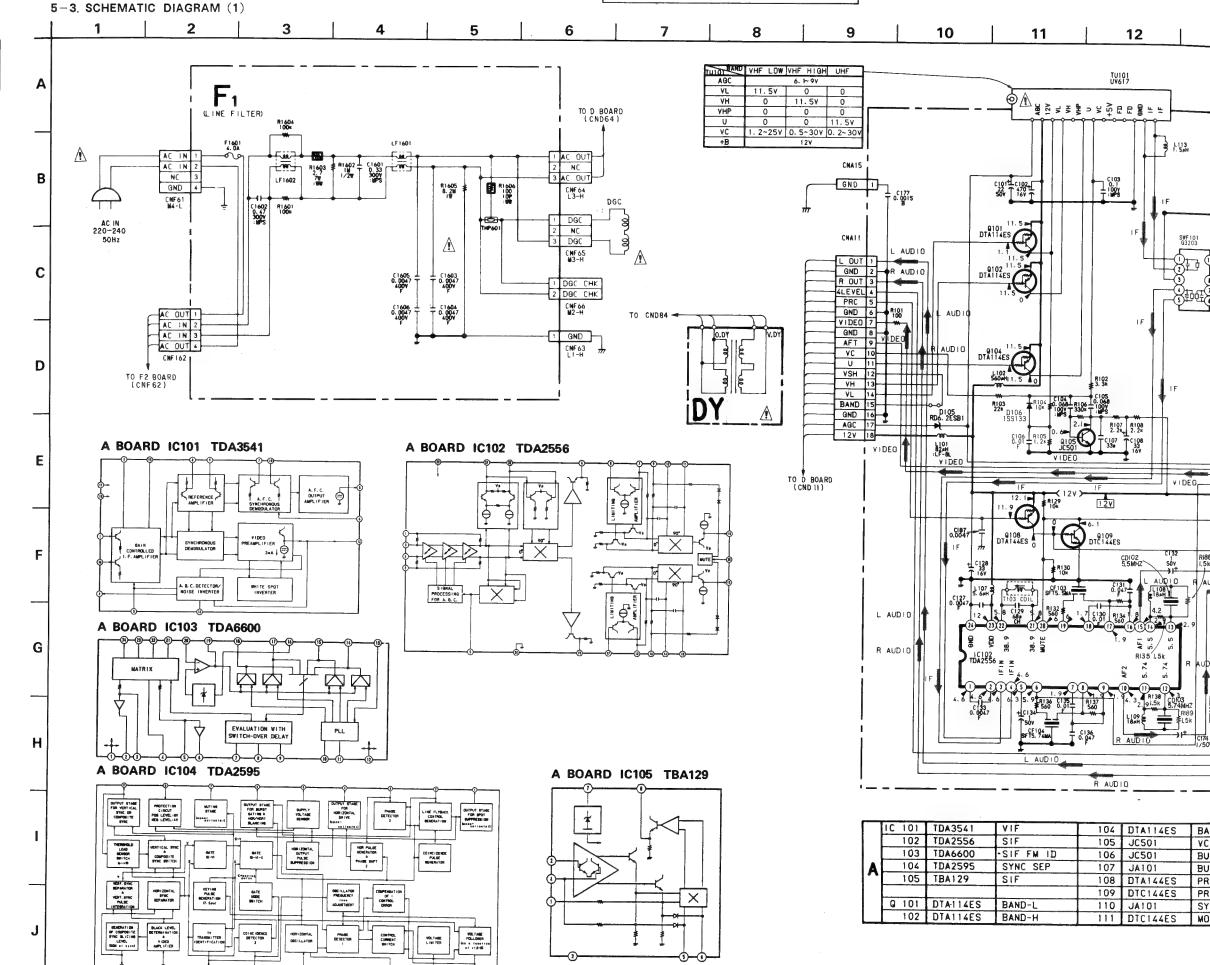
SOLID : FPRD NONFLAMMABLE CARBON NONFLAMMABLE FUSIBLE : FUSE : RS NONFLAMMABLE WIREWOUND : RB NONFLAMMABLE CEMENT : LF-8L MICRO INDUCTOR CAPACITOR : TA TANTALUM : PS STYROL : PP POLYPROPYLENE

: PP POLYPROPYLENE
: PT MYLAR
: MPS METALIZED POLY

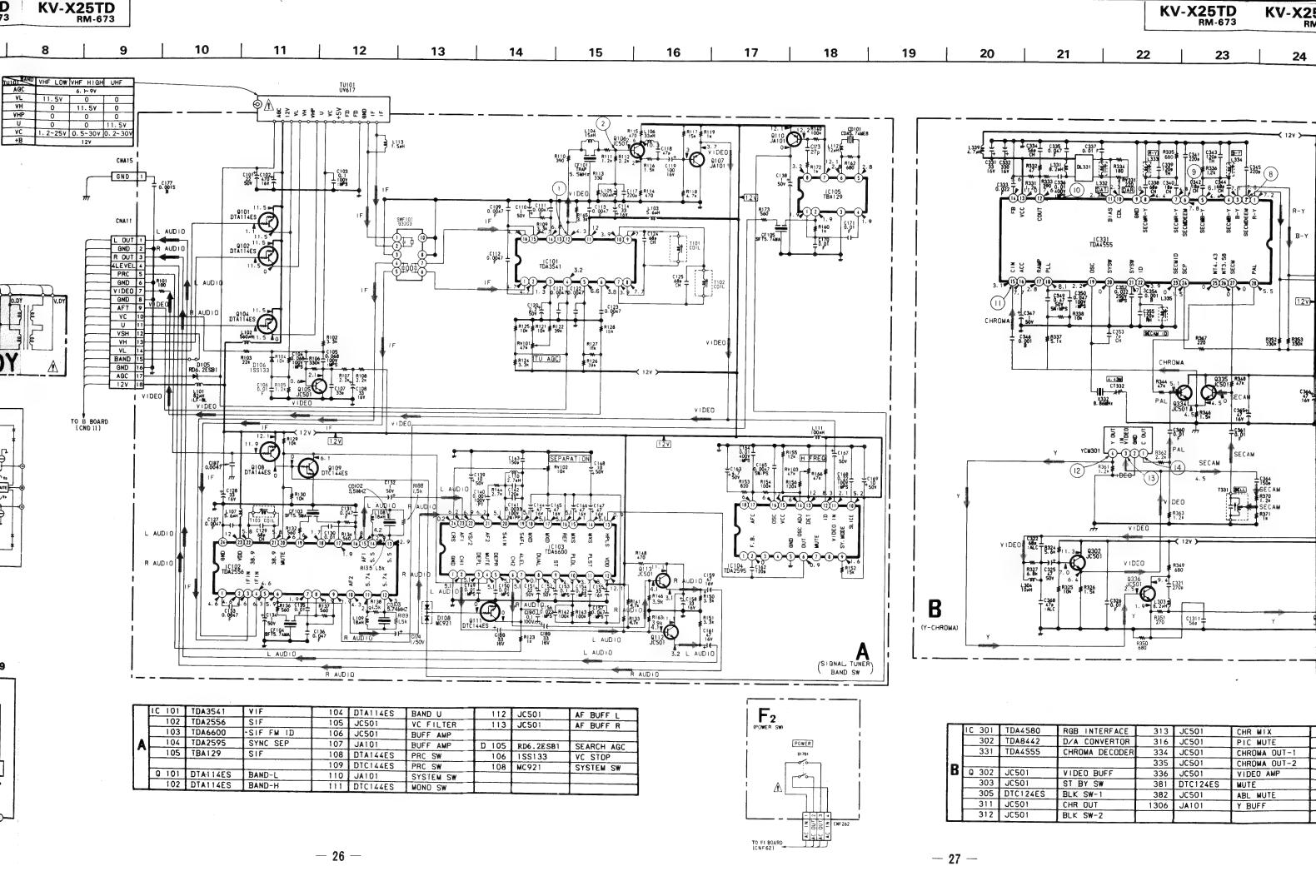
: MPS METALIZED POLYESTER : MPP METALIZED POLYPROPYLENE : ABL BIPOLAR

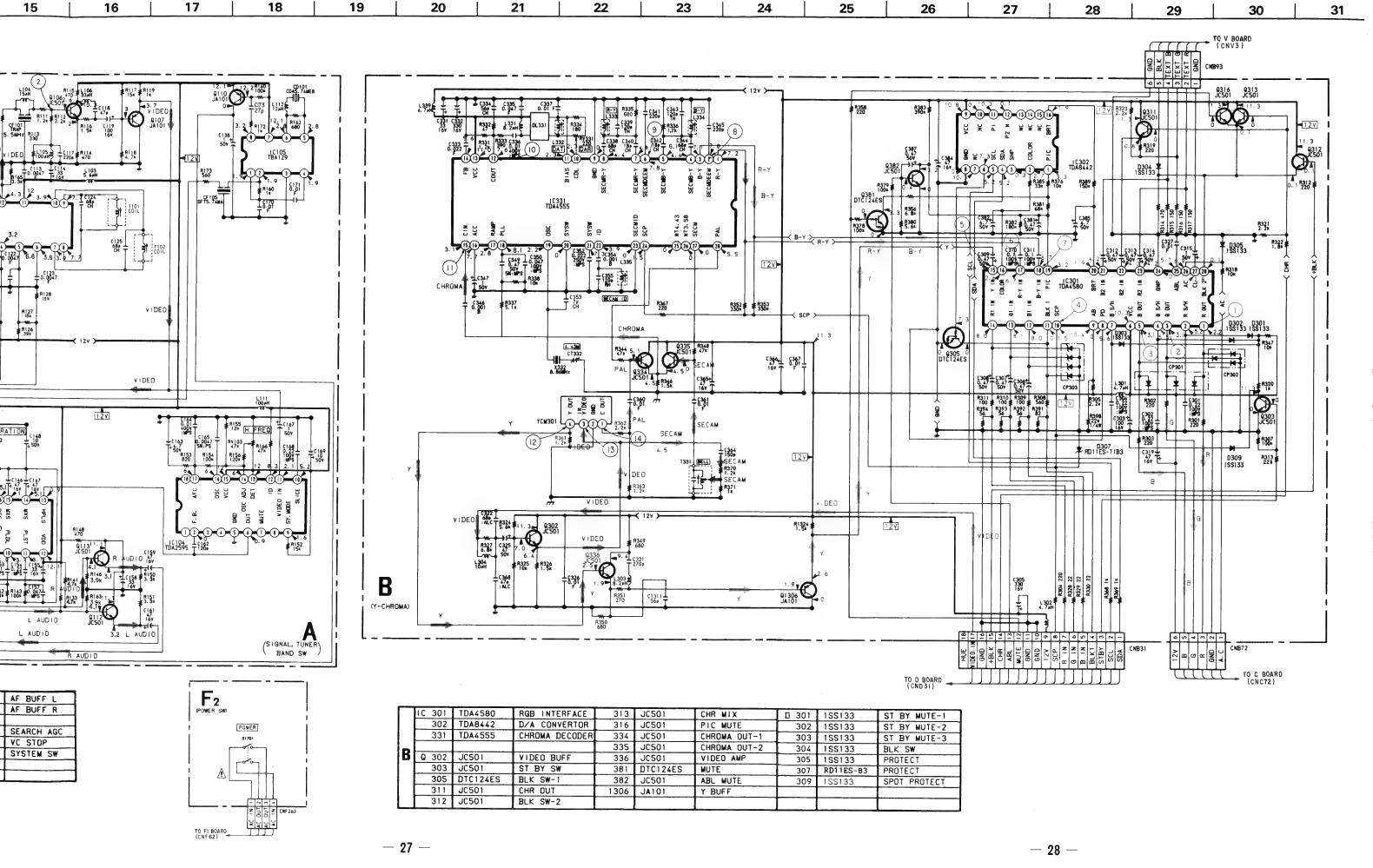
METAL FILM

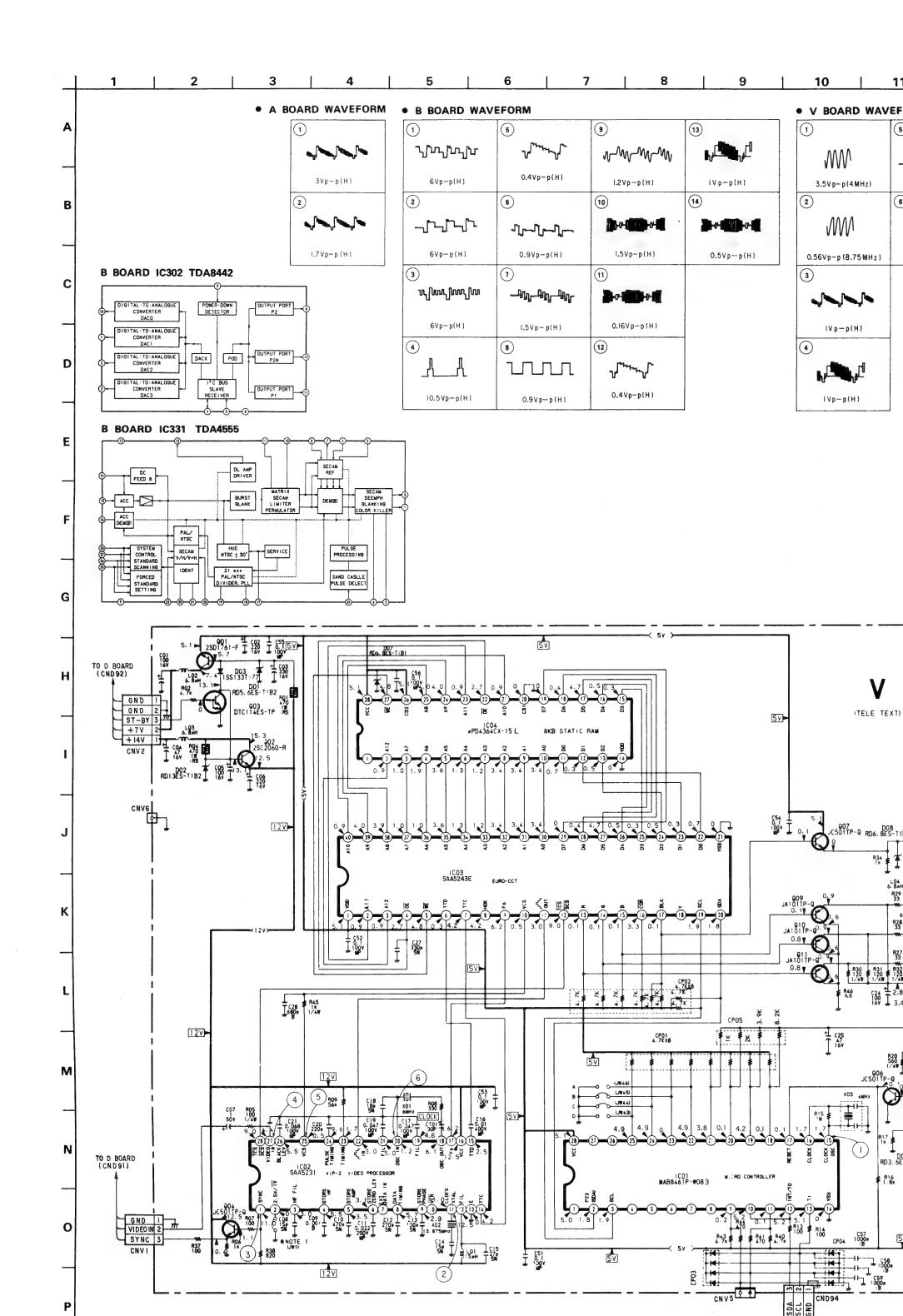
: ALT HIGH TEMPERATURE : ALR HIGH RIPPLE

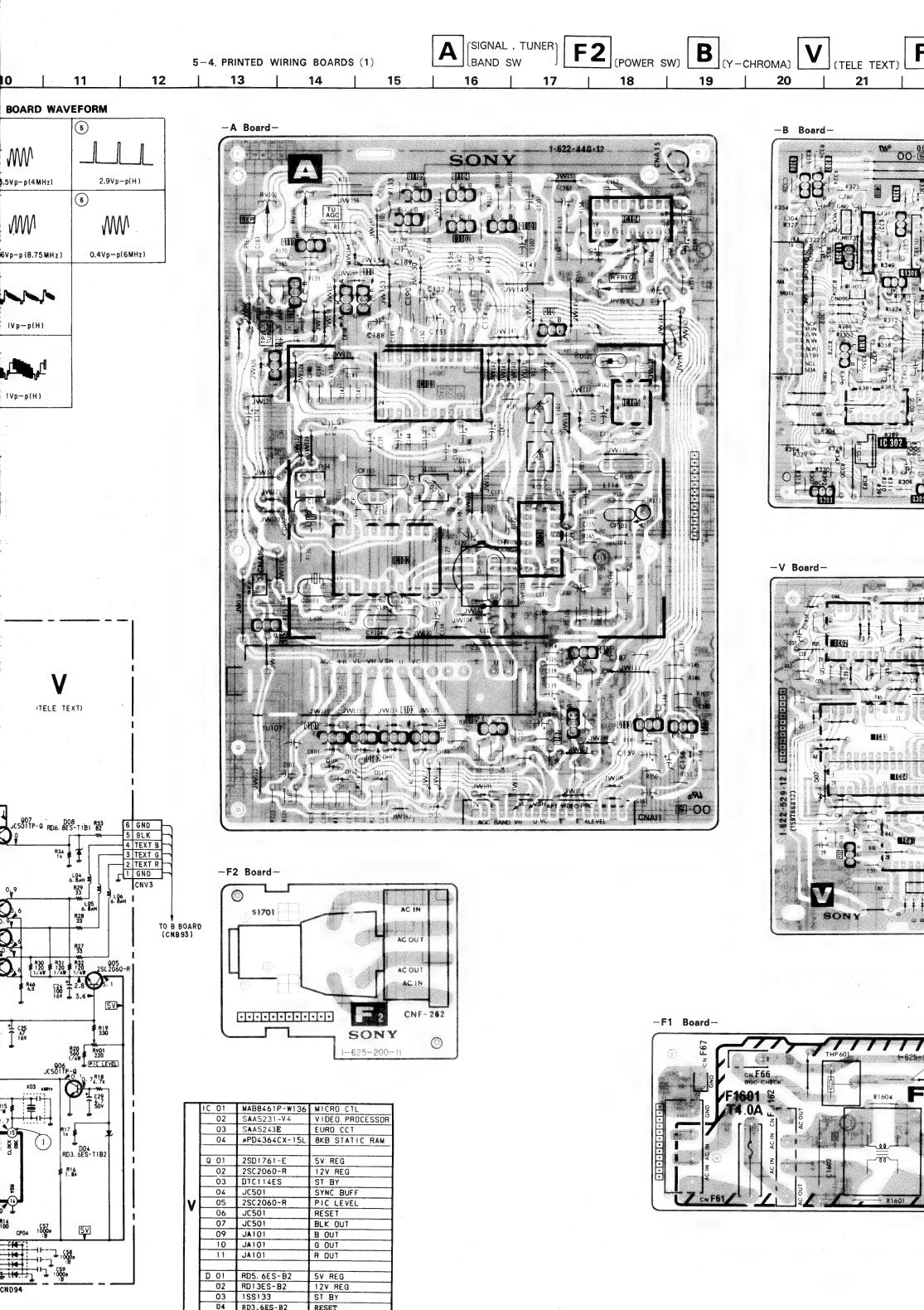


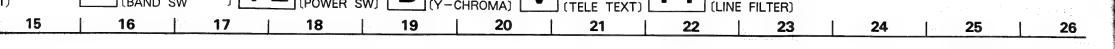
— 25 —

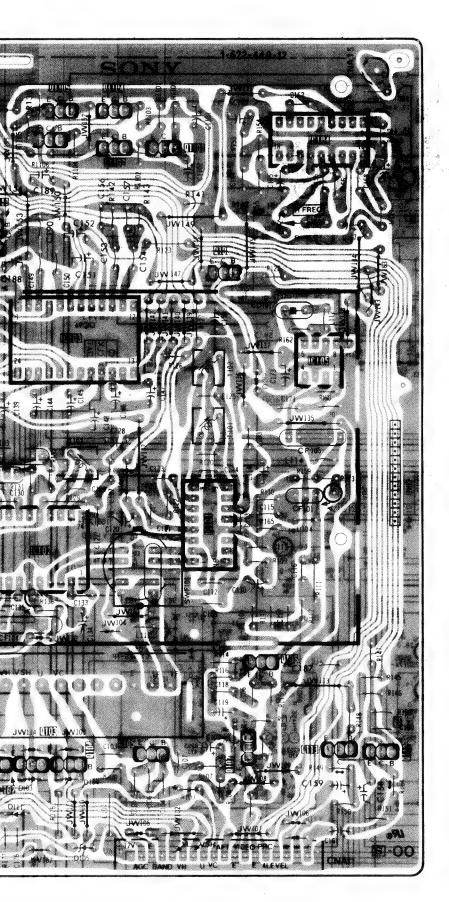




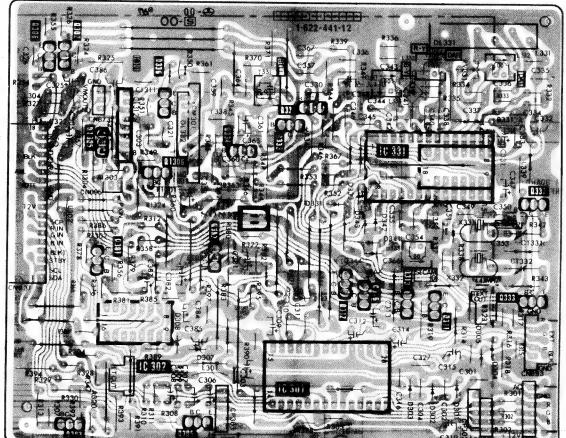




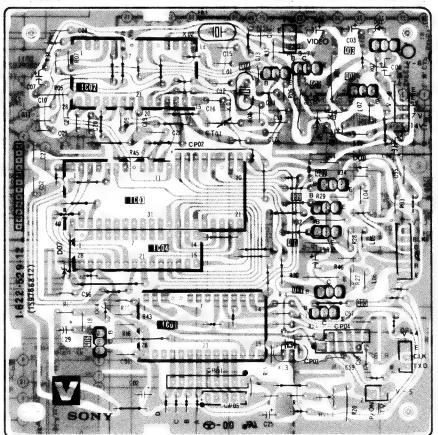


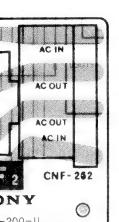


-B Board-

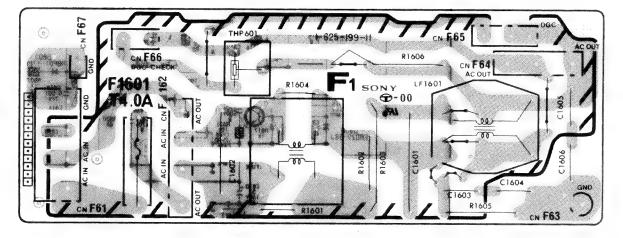


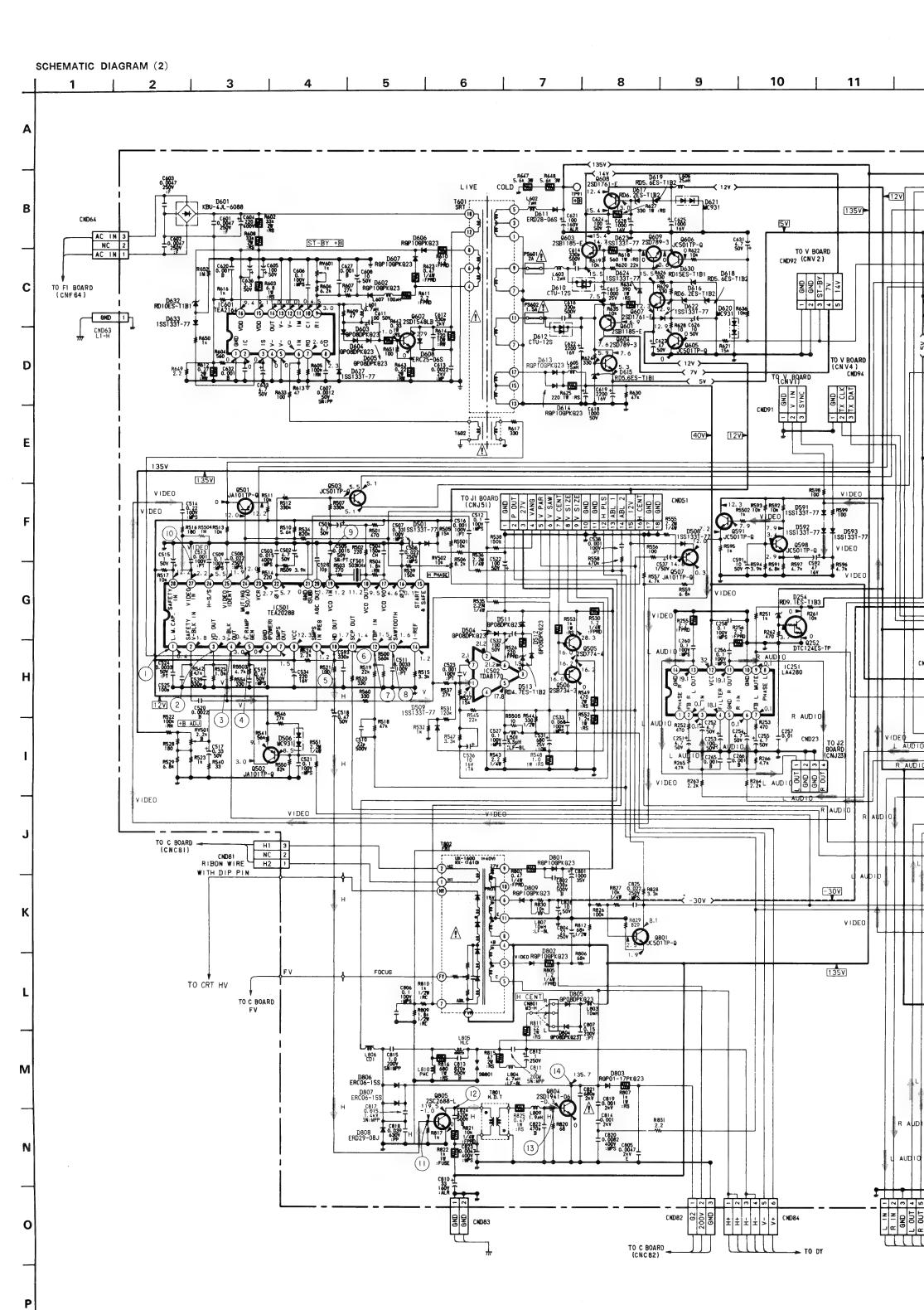
-V Board-

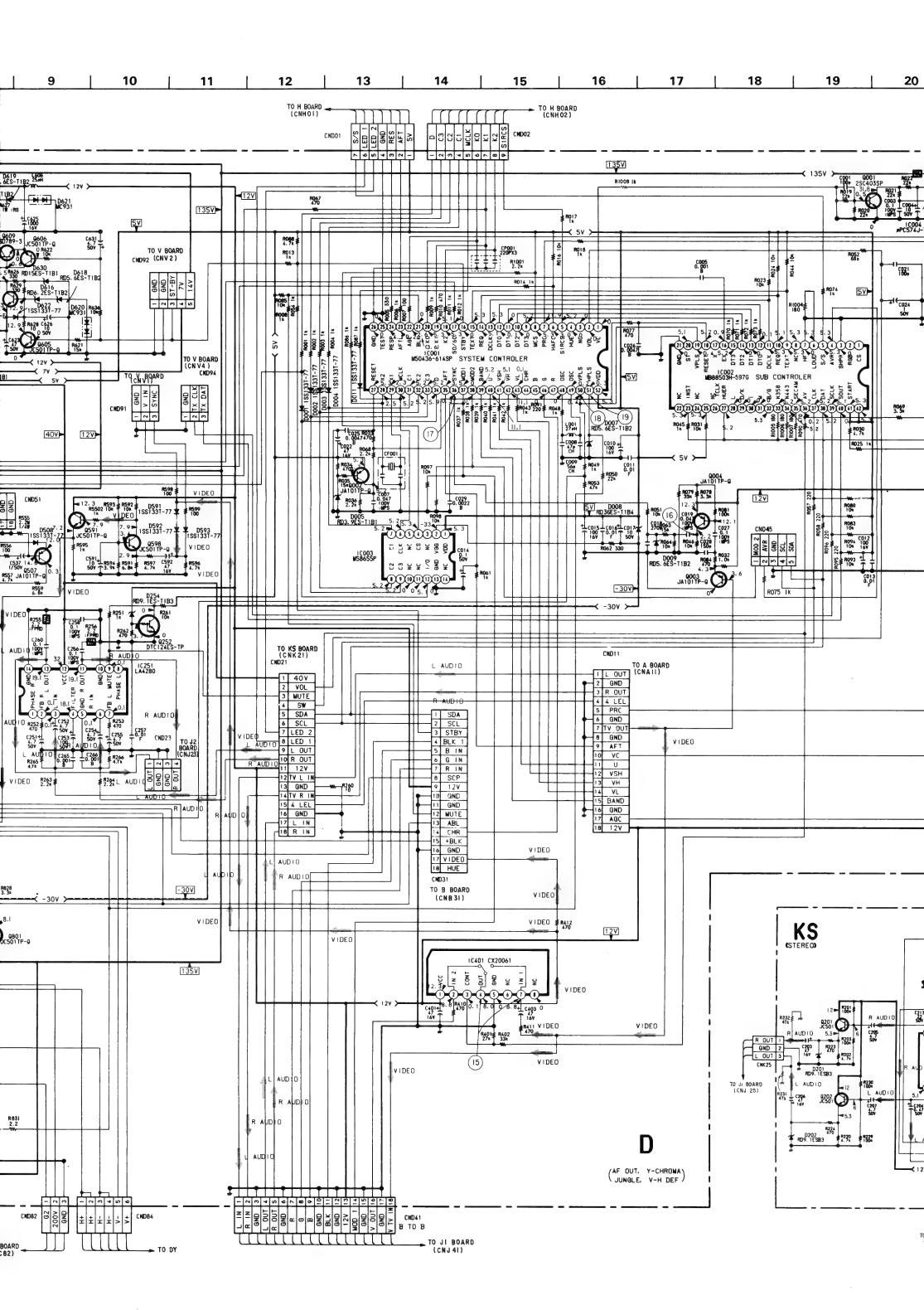


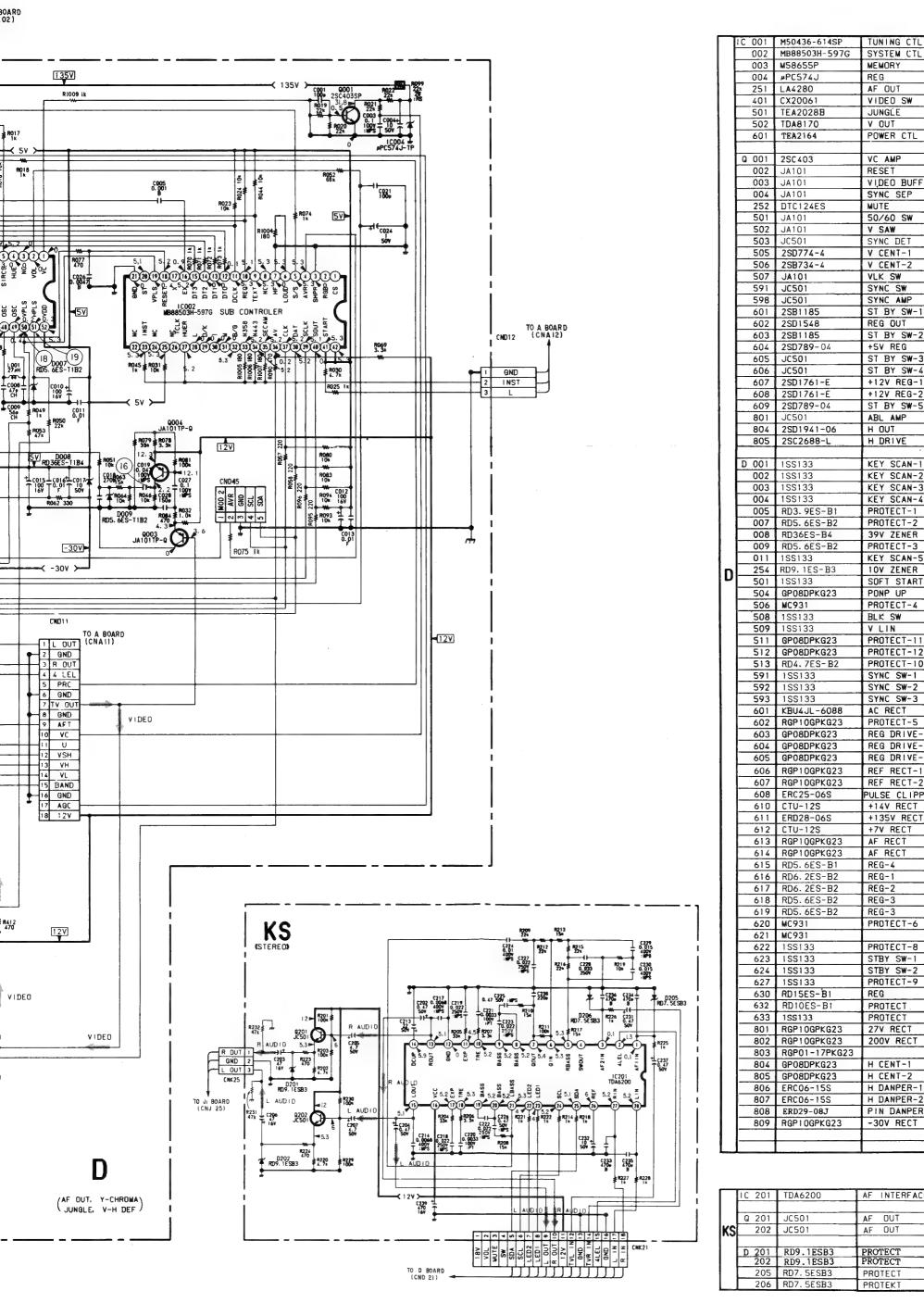


-F1 Board-









16

17

18

19

20

21

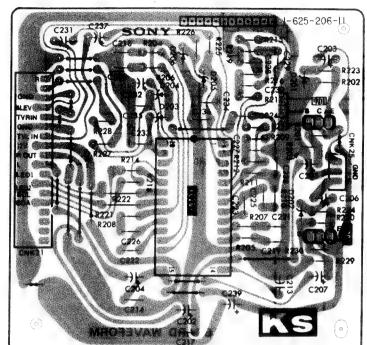
23

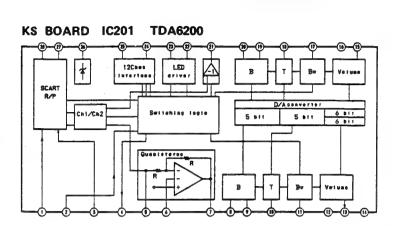
25

26

PRINTED WIRING BOARDS (2)

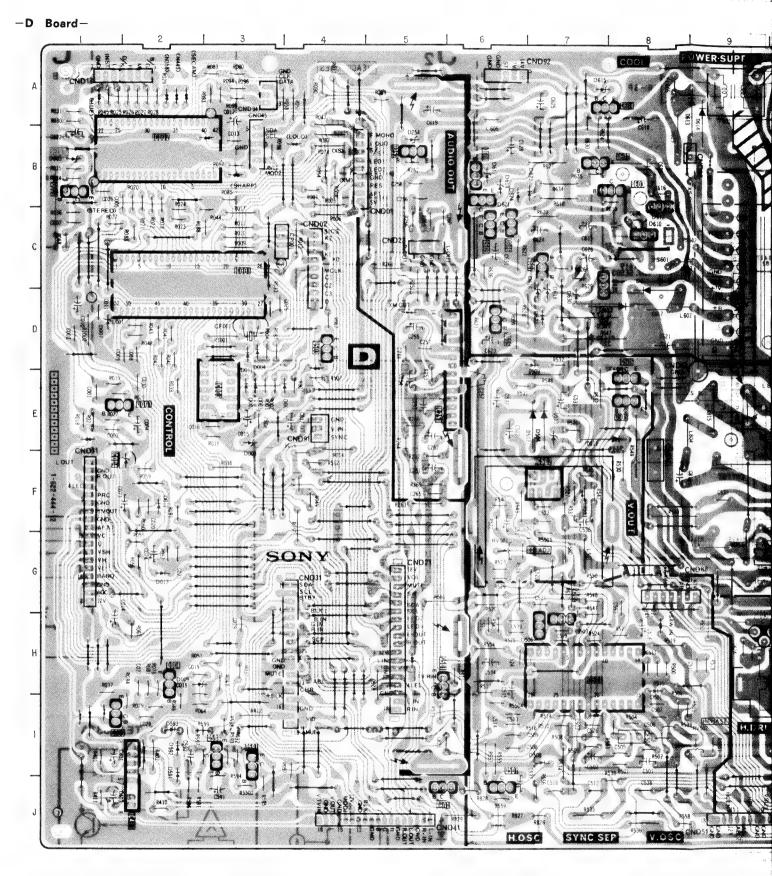






• D BOARD WAVEFORM

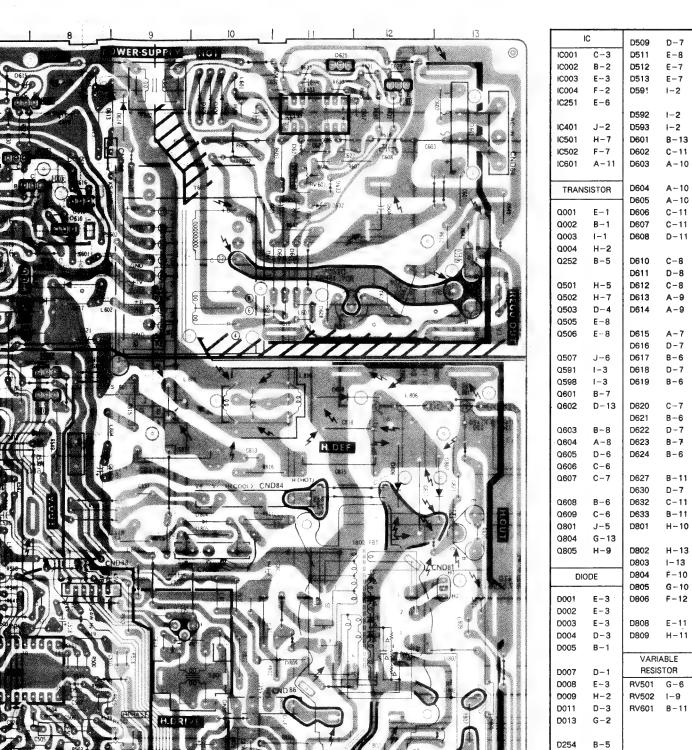
1	5	9	13)	17)
^_		W		
1.2Vp-p(H)	4 Vp p(H)	0.1Vp-p(503kHz)	12Vp-p(H)	5.6Vp-p(H)
2	6	10	14	18
	_/\/\	Drown J.	_//_	
2.4Vp-p(V)		1.8Vp-p(H)	1200Vp-p(H)	5.6Vp-p(V)
3	1	11)	15	19
			Wh.	
5.3Vp-p(V)	14Vp-p(H)	3.2Vp-p(H)	Vp-p(H)	6.4Vp-p(H)
•	8	12	16	:
		M		
2.4Vp-p(V)	3.6Vp-p(H)	230Vp-p(H)	I,IVp-p(H)	l

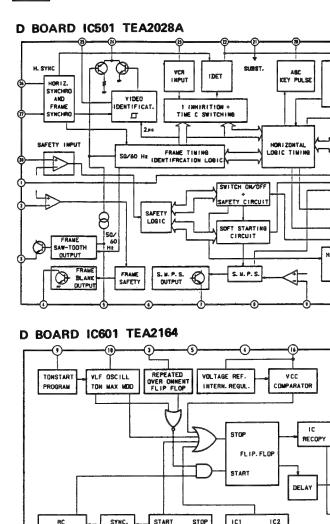


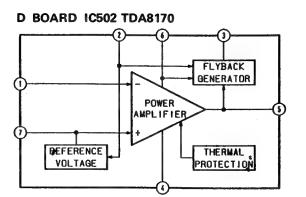


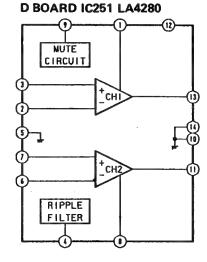
KV-X25TD

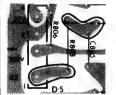












The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

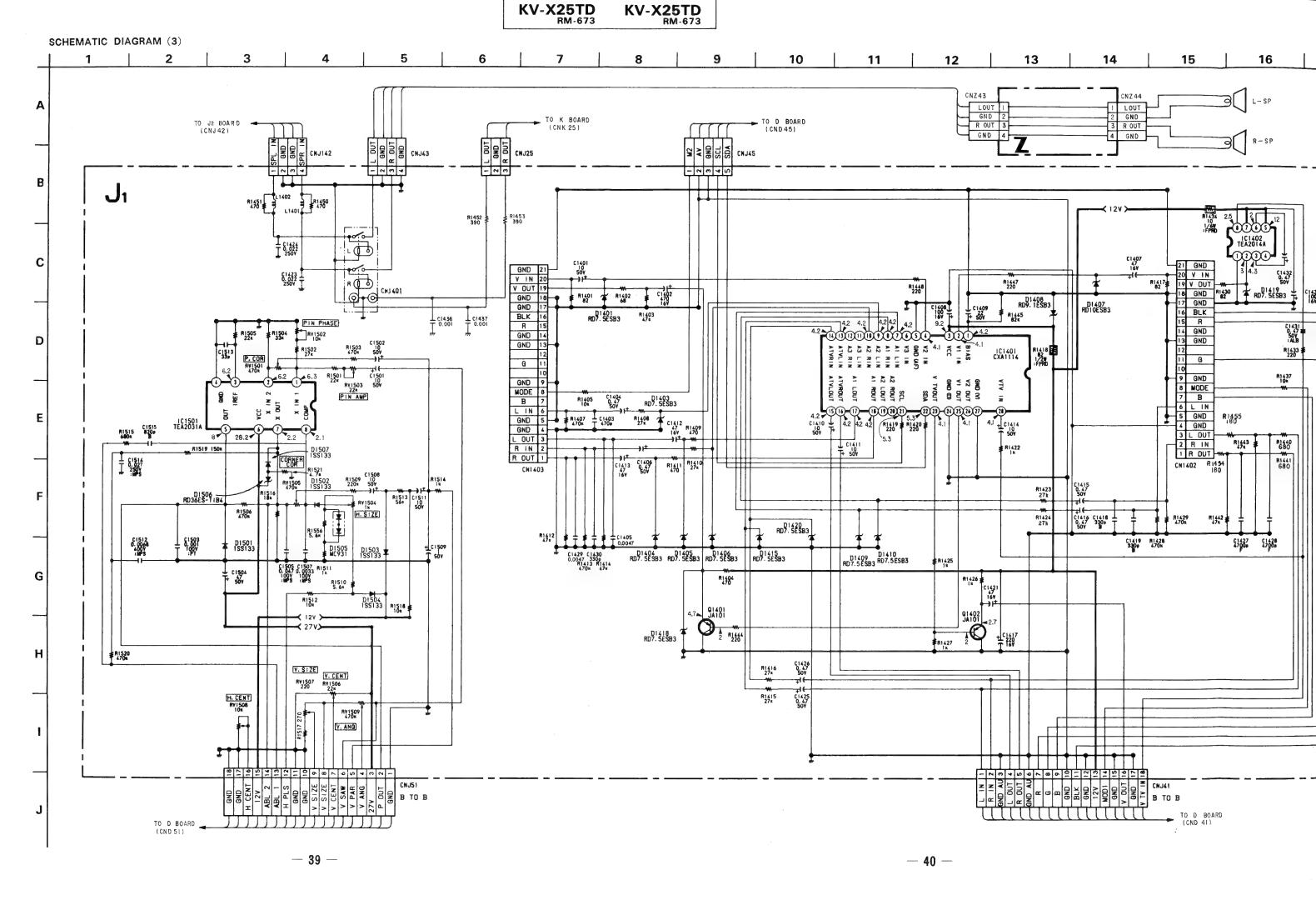


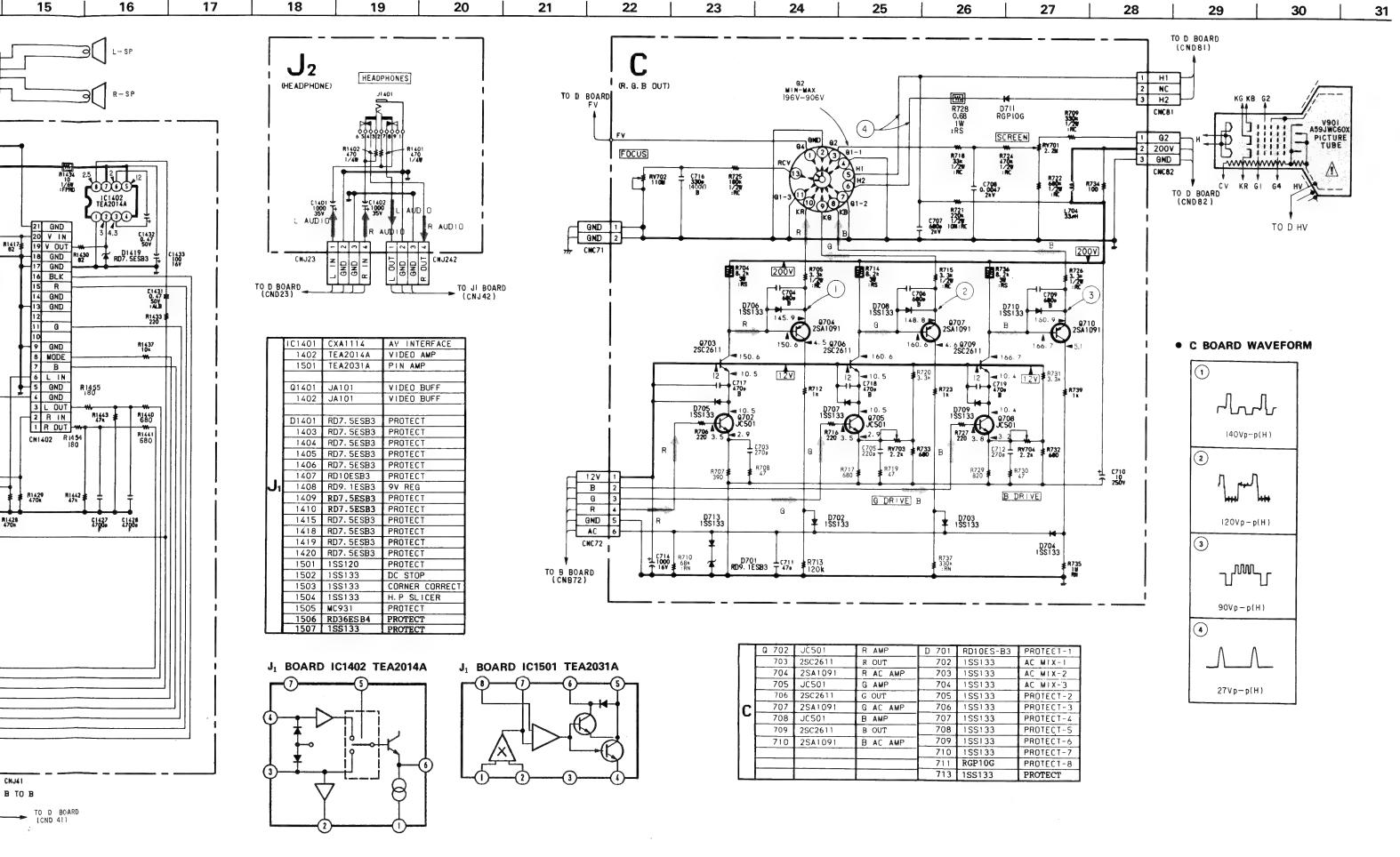
D501 H-8 D504 E-7 0506 H-7 D508 I-7 REFER. CURRENT VOLTAGE

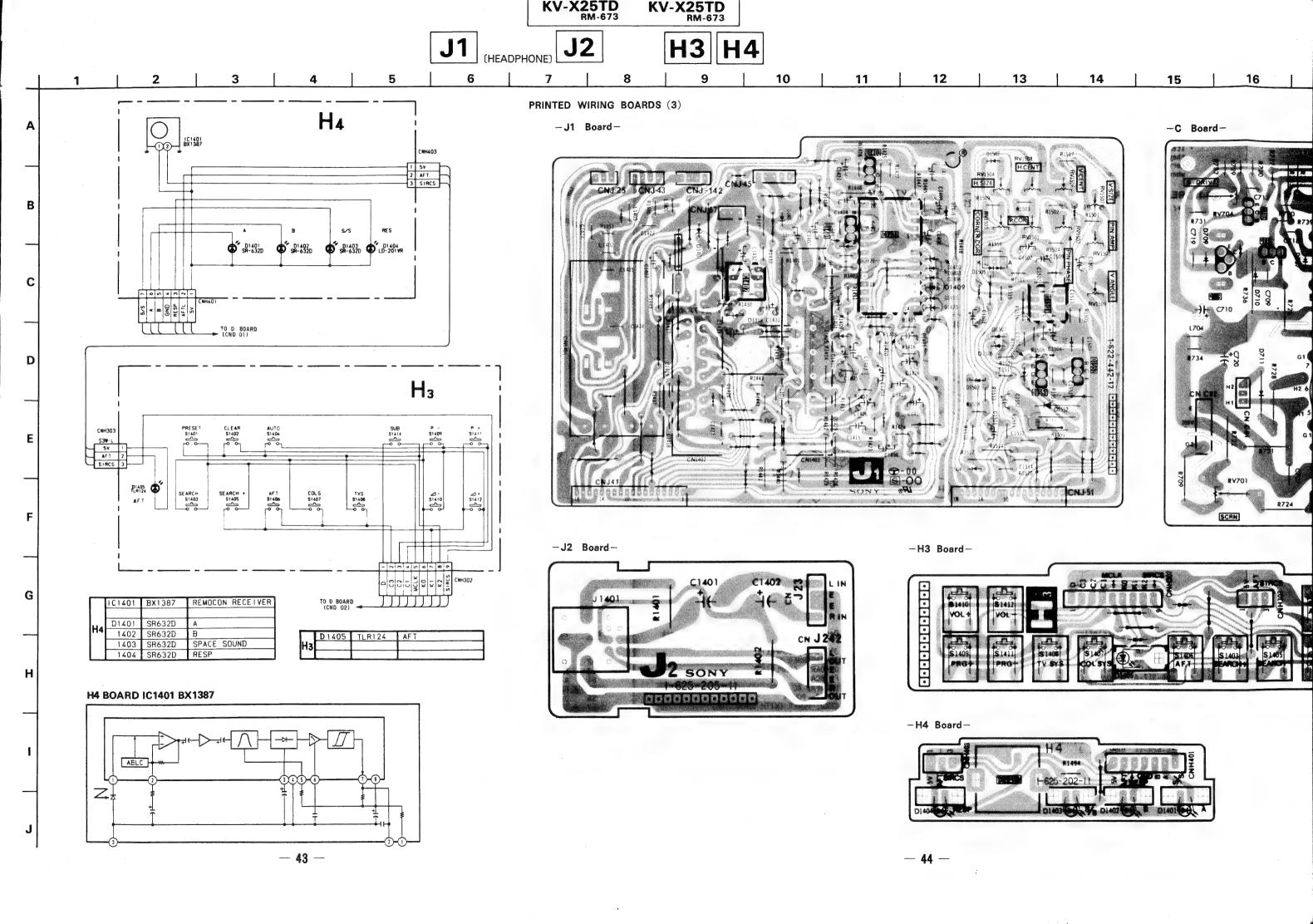
S. SAND CASTLE

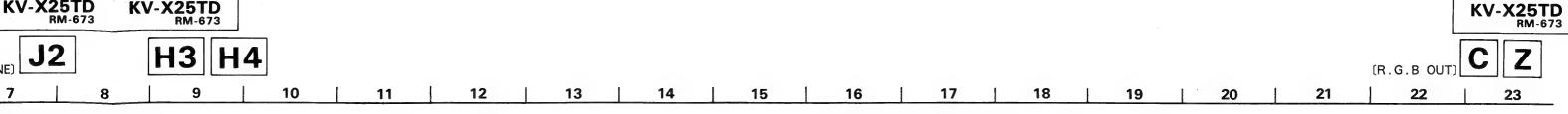
I. OUTPUT

€

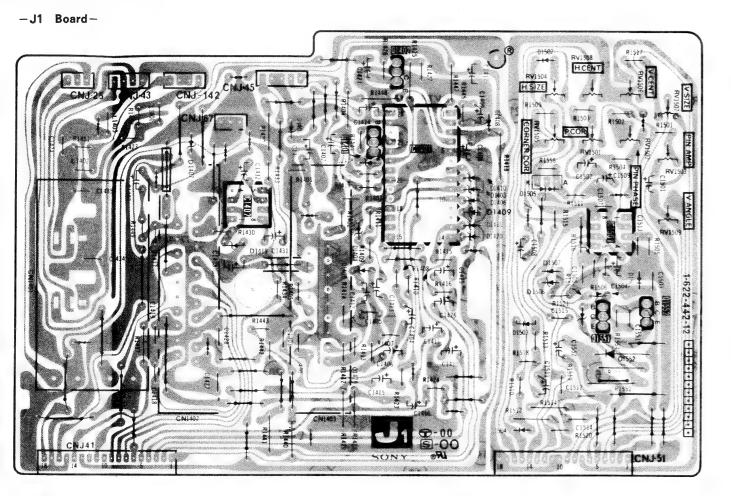


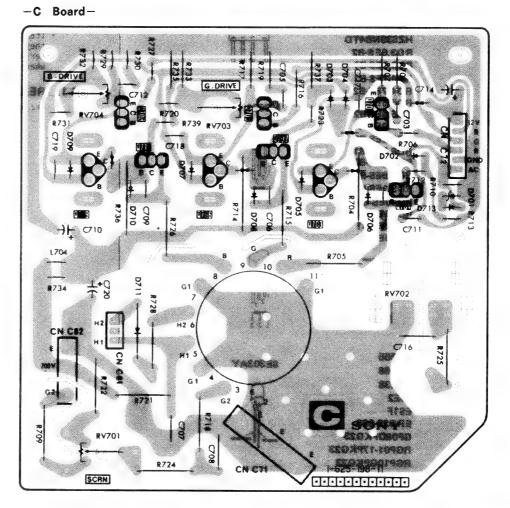


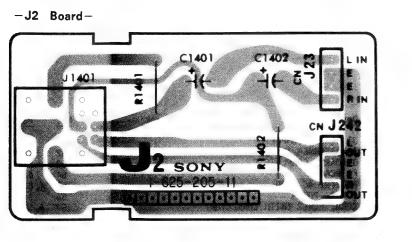


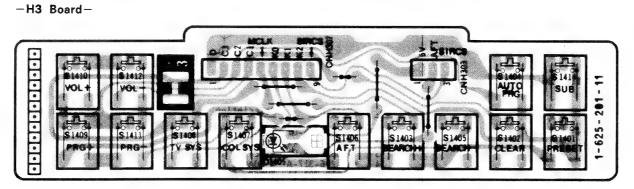


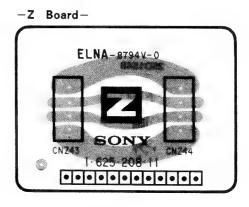














Part N

4-387-

4-387-

X-4385

4-386-

*A-1330

*4-379-

4-303-

*4-385-63 <u>∧</u>.1-426-

*4-371-4-373-*4-387-

55 **A**.8-733-56 3-703-

57 **A** 1-451-58 *4-379-

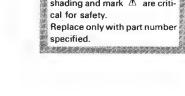
51

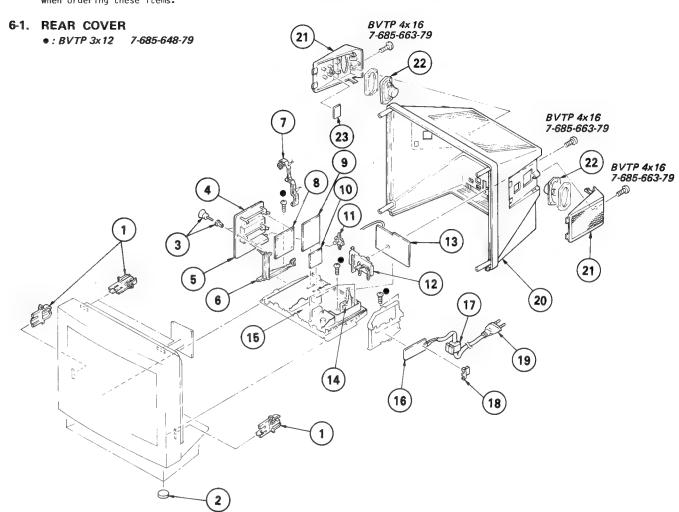
SECTION 6 EXPLODED VIEWS

NOTE:

- · Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " \star " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark A are critical for safety.





Part No.	Description	Remark	No.	Part No.	Description Remark
4-382-745-01 4-809-913-XX 4-386-618-01 *A-1296-317-A 1 -463-881-11 *4-386-629-11 *A-1347-014-A *A-1135-455-A *1-625-206-11 *4-386-617-01 *4-386-624-11	HOLDER, RC FOOT, F RIVET, T TYPE A BOARD, COMPLETE TUNER, ET (UV-617) BRACKET, A SUPPORTER, PC BOARD V BOARD, COMPLETE B BOARD, COMPLETE KS BOARD HOLDER, TERMINAL BRACKET, J	377 97 464	13 14 15 16 17 18 19 20 21 22 23	*A-1371-373-A 1.439-416-11 *A-1345-720-A *1-625-199-11 1.4-386-620-01 1.559-346-11 1.4-387-818-01 1.4-385-930-1 1.503-642-21 *1-625-208-11	J1 BOARD, COMPLETE TRANSFORMER ASSY, FLYBACK D BOARD, COMPLETE F1 BOARD HOLDER, AC CORD COVER, POWER CORD, POWER (WITH CONNECTOR) COVER, REAR BOARD ASSY, BAFFLE SPEAKER Z BOARD

5-5. SEMICONDUCTORS



CX20061

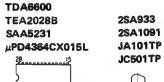


LA4280





CXA1114 MAB8461P-W136 TDA4555 TDA4580 TDA6200 TDA6600





2SC2458

2SC2603

DTA114ES

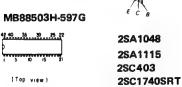
DTA124ES

DTA144ES

DTC114ES

DTC124ES

DTC144ES









(Top view

TDA3541 TDA8442 **TEA2164** 161514131211109





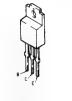
















ISS119

ISS120

ISS133

ISS148

KBU-4JL

MC921

MC931

SE303AY

SR632D

TLR124

0

2SA1175

2SC2785

2SB734

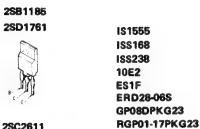
2SD774

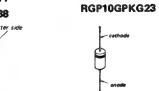
2SB740

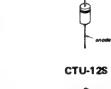
2SC1475

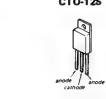
2SC2060

2SD789

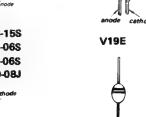














No.	Part No.	Description	Remark	No.	Part No.	<u>Description</u> Remark
1 2 3 4 5 6 7 8 9 10 11 12	4-382-745-01 4-809-913-XX 4-386-618-01 *A-1296-317-A 1 . 1463-881-11 *4-386-629-11 *4-386-628-11 *A-1347-014-A *A-1135-455-A *1-625-206-11 *4-386-617-01 *4-386-624-11	TUNER, ET (UV-617)	ig fine sample, was a	13 14 15 16 16 17 18 19 20 21 21 22 23	A.1-439-416-11	J1 BOARD, COMPLETE TRANSFORMER ASSY, FLYBACK D BOARD, COMPLETE F1 BOARD HOLDER, AC CORD COVER, POWER CORD, POWER (WITH CONNECTOR) COVER, REAR BOARD ASSY, BAFFLE SPEAKER Z BOARD

SECTION 6 EXPLODED VIEWS

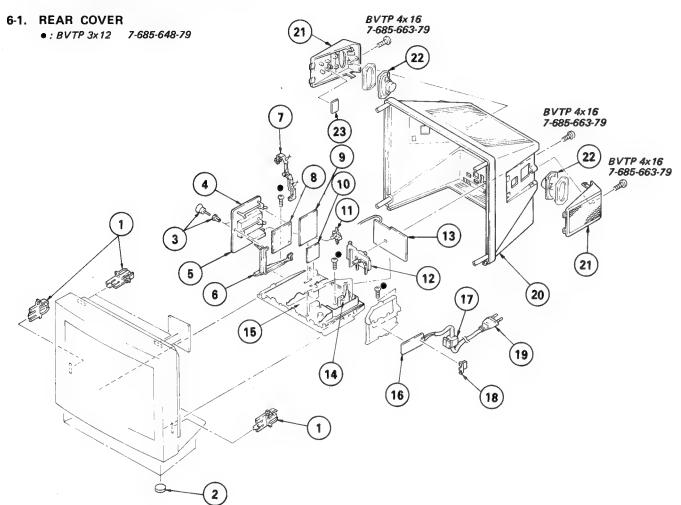
NOTE:

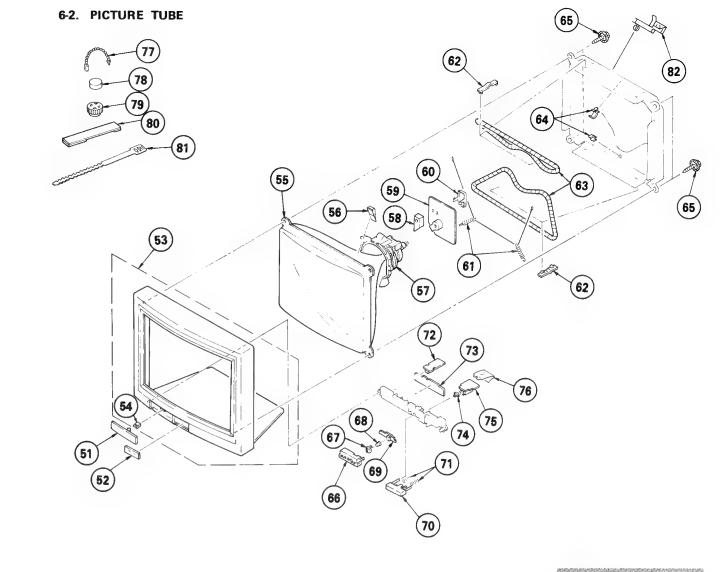
- · Items with no part number and no description are not stocked because they are seldom required for routine service.

 The construction parts of an assembled
- part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

100 The components identified by shading and mark A are critical for safety.

Replace only with part number specified.





Description Part No. Remark | No. Part No. Description Remark *A-1371-373-A J1 BOARD, COMPLETE *A-139-416-11 TRANSFORMER ASSY, FLYBACK *A-1345-720-A D BOARD, COMPLETE 4-382-745-01 HOLDER, RC 4-809-913-XX FOOT, F 4-386-618-01 RIVET, T TYPE 4 *4-1296-317-A A BOARD, COMPLETE
5 *A.1-463-881-11 TUNER, ET (UV-617)
6 *4-386-629-11 BRACKET, A
7 *4-386-628-11 SUPPORTER, PC BOARD
8 *A-1347-014-A V BOARD, COMPLETE
9 *A-1135-455-A B BOARD, COMPLETE
10 *A-14-625-206-11 *1-625-199-11 F1 BOARD Δ.4-022-115-01 HOLDER, AC CORD *4-386-620-01 COVER, POWER Δ.1-559-346-11 CORD, POWER (WITH CONNECTOR) 4-387-818-01 COVER, REAR 21 22 23 X-4385-930-1 BOARD ASSY, BAFFLE *1-625-206-11 KS BOARD 1-503-642-21 SPEAKER *1-625-208-11 Z BOARD *4-386-617-01 HOLDER, TERMINAL *4-386-624-11 BRACKET, J

No.	Part No.	Description	Remar	<u>k 1</u>	No.	Part No.	Description	Remark
51	4-387-814-21	DOOR			67	*4-381-686-01	BRACKET (B), BAR, OPTICAL	
52	4-387-826-01	WINDOW, ORNAMENTAL		ì	68	*4-374-987-01		
53	X-4385-931-1	BEZEL & CABINET ASSY	54	i	69	*1-625-202-11		
54	4-386-710-01			j	70	4-387-812-01	BUTTON, POWER	
	▲8-733-224-05			- 1	71	4-387-809-01	SPRING	
56	3-703-961-01				72	*1-625-205-11	J2 BOARD	
		DEFLECTION YOKE (SY-153E)	to a continuous contrator of the contrator	1	73	*1-625-201-11	H3 BOARD	
58	*4-379-167-01			la se	74	A.1-571-410-11	SWITCH, PUSH (AC POWER) (1 KEY)	3"
59	*A-1330-849-A	C BOARD, COMPLETE			75	*1-625-200-11	F2 BOARD	
60	*4-379-160-01	COVER (REAR LID), CV			76	*4-387-804-01	INSULATOR	
61	4-303-774-XX	SPRING		- 1	77	4-308-870-00	CLIP, LEAD WIRE	
62	*4-385-916-01				78	1-452-032-00	MAGNET, DISK; 10MM Ø	
63	▲.1-426-325-11		1.	1	79	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ₺	
64	*4-371-629-01	STOPPER, WIRE		- 1	80	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
65	4-373-263-01	SCREW (M), PT		- 1	81	3-701-007-00	BAND, BINDING	
66	*4-387-813-01	COVER, H2		1	82	*4-387-216-01	HOLDER, LEAD	

The components identified by shading and mark A are criti-

Replace only with part number

cal for safety.

specified.

SECTION 7 ELECTRICAL PARTS LIST

NOTE:

specified.

The components identified by shading and mark A are critical for safety. Replace only with part number

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

CAPACITORS

COILS

• MF : μF, PF : μμF

• MMH : inH, UH : μH

Note: In this parts list, the mounting diagram is for a different product. Therefore, an excess of parts is listed.

RESISTORS

All resistors are in ohms
 F: nonflammable

Ref.No. Part No.	Description			Remark	Ref.No.	Part No.	Description			Remark
*A-1135-455-A <u>CA</u>	B BOARD, CO				C367 C368 C381 C382	1-101-004-00 1-101-880-00 1-124-902-00 1-124-927-11	CERAMIC ELECT ELECT	0.01MF 47PF 0.47MF 4.7MF	5% 20% 20%	50V 50V 50V 50V
C301 1-110-179-81 C302 1-110-179-81 C303 1-126-101-11 C304 1-110-179-81 C305 1-124-119-00	MYLAR ELECT MYLAR	0.22MF 0.22MF 100MF 0.22MF 330MF	10% 10% 20% 10% 20%	100 V 100 V 16 V 100 V 16 V		1-124-477-11 1-124-927-11 (1-124-902-00 1-101-884-00	ELECT	47MF 4.7MF 0.47MF 56PF	20% 20% 20% 5%	16V 50V 50V
C306 1-124-902-00 C307 1-124-902-00 C308 1-124-902-00 C309 1-124-902-00 C310 1-110-175-81	ELECT ELECT ELECT	0.47MF 0.47MF 0.47MF 0.47MF 0.1MF	20% 20% 20% 20% 10%	50V 50V 50V 50V 100V	CNB72	*1-562-370-21 *1-564-895-11 *1-560-278-00	PLUG, CONNECT	OR 6P	ARD 18P	
C311 1-110-175-81 C312 1-124-902-00 C313 1-124-902-00 C314 1-124-902-00 C315 1-124-499-11	ELECT ELECT ELECT	0.1MF 0.47MF 0.47MF 0.47MF 1MF	10% 20% 20% 20% 20%	100V 50V 50V 50V 50V	CT332	<u>TRI</u> 1-141-181-11	MMER CAP, TRIMMER			
C319 1-124-477-11 C321 1-102-980-00 C322 1-101-888-00 C325 1-124-477-11 C326 1-101-004-00	CERAMIC CERAMIC ELECT	47MF 270PF 68PF 47MF 0.01MF	20% 5% 5% 20%	16V 50V 50V 16V 50V	D301 D302 D303 D304	8-719-911-19 8-719-911-19 8-719-911-19 8-719-911-19				
C327 1-101-004-00 C331 1-124-963-11 C332 1-124-119-00 C333 1-101-005-00 C334 1-101-884-00	ELECT ELECT CERAMIC	0.01MF 33MF 330MF 0.022MF 56PF	20% 20% 5%	50V 16V 16V 50V 50V	D305 D307 D309	8-719-911-19 8-719-110-23	DIODE 188119.	В3		
C335 1-101-006-00 C336 1-110-190-81 C337 1-101-004-00 C338 1-101-888-00 C339 1-102-735-00	MYLAR CERAMIC CERAMIC	0.047MF 0.01MF 0.01MF 68PF 120PF	10% 5% 5%	50V 400V 50V 50V 50V	DL331	1-415-187-13	<u>AY LINE</u> DELAY LINE			
C340 1-102-953-00 C341 1-102-978-00 C342 1-102-953-00 C343 1-102-735-00 C344 1-101-888-00	CERAMIC CERAMIC CERAMIC	18PF 220PF 18PF 120PF 68PF	5% 5% 5% 5%	50V 50V 50V 50V 50V	IC302		IC TDA4580 IC TDA8442 IC TDA4555-V8	3		
C345 1-102-978-00 C346 1-102-074-00 C347 1-124-499-11 C349 1-136-173-00 C350 1-110-171-81	CERAMIC ELECT FILM	220PF 0.001MF 1MF 0.47MF 0.047MF	5% 10% 20% 5% 10%	50V 50V 50V 50V 100V	 L301 L302 L303 L304	1-410-868-21 1-410-868-21 1-410-469-21 1-410-470-11	INDUCTOR	4.7UH 4.7UH 8.2UH 10UH		
C352 1-110-182-81 C353 1-102-506-00 C354 1-102-074-00 C355 1-102-679-00 C360 1-101-004-00	CERAMIC CERAMIC CERAMIC	0.022MF 7PF 0.001MF 120PF 0.01MF	10% 0.5PF 10% 5%	250V 50V 50V 50V 50V	L331 L332 L333 L334 L335	1-410-469-21 1-404-539-11 1-404-554-11 1-404-554-11 1-404-554-11	INDUCTOR COIL COIL COIL COIL	8.2UH		
C361 1-101-004-00 C364 1-101-361-00 C365 1-124-477-11 C366 1-124-477-11	CERAMIC ELECT	0.01MF 150PF 47MF 47MF	5% 20% 20%	50V 50V 16V 16V	L339	1-410-868-21	INDUCTOR	4.7UH		

B Z F2

The components identified by shading and mark \triangle are critical for safety.

Replace only with part number specified.

Ref.No.	Part No.	 _Descript:	ion			Remark	IRef No	Part No.	Docamintion				_
						NCMUT K	1		Description				Remark
Q302 Q303 Q304 Q305 Q311	8-729-178-54 8-729-178-54 8-729-900-36 8-729-900-36	TRANSIST(TRANSIST(TRANSIST(OR 2SC2785 OR 2SC2785 OR DTC124E OR DTC124E	S			R356 R357 R358 R361 R362	1-249-427-11 1-249-409-11 1-249-409-11 1-249-418-11 1-249-421-11	CARBON CARBON CARBON CARBON	6.8K 220 220 1.2K 2.2K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q312 Q313 Q316 Q334 Q335	8-729-178-54 8-729-178-54 8-729-178-54 8-729-178-54 8-729-178-54 8-729-178-54	TRANSISTO TRANSISTO TRANSISTO TRANSISTO	OR 2SC2785 OR 2SC2785 OR 2SC2785 OR 2SC2785 OR 2SC2785				R363 R367 R368 R369 R370	1-249-418-11 1-249-409-11 1-249-417-11 1-249-417-11 1-249-418-11	CARBON CARBON CARBON CARBON	1.2K 220 1K 1K 1.2K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q336 Q381 Q382 Q1306	8-729-178-54 8-729-900-36 8-729-178-54 8-729-117-54	TRANSISTO TRANSISTO TRANSISTO	OR 2SC2785 OR 2SC2785 OR DTC124E: OR 2SC2785 OR 2SA1175	5			R371 R376 R378 R379 R380	1-249-417-11 1-249-429-11 1-249-441-11 1-249-441-11 1-249-426-11	CARBON CARBON CARBON CARBON CARBON	1K 10K 100K 100K 5.6K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
	RES	ISTOR					R381 R382 R383	1-249-439-11 1-247-885-00 1-215-483-00	CARBON CARBON CARBON	68K 180K 390K	5% 5% 5%	1/4W 1/4W 1/4W	
R301 R302 R303	1-249-409-11 1-249-409-11 1-249-409-11	CARBON CARBON	220 220	5% 5%	1/4W 1/4W			1-249-435-11 1-247-883-00	CARBON CARBON	33K 150K	5% 5%	1/4W 1/4W	
R304 R305	1-249-409-11 1-249-421-11	CARBON CARBON CARBON	220 220 2.2K	5% 5% 5%	1/4W 1/4W 1/4W		R393	1-249-404-00 1-249-402-11 1-249-402-11 1-249-402-11	CARBON CARBON CARBON CARBON	82 56 56 56	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
R307 R308 R309 R310	1-249-441-11 1-249-414-11 1-249-405-11 1-249-405-11	CARBON CARBON CARBON CARBON	100K 560 100 100	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		R398 R1324	1-249-433-11 1-249-419-11	CARBON	22K 1.5K	5% 5%	1/4W 1/4W	
	1-249-405-11	CARBON	100	5%	1/4W	ĺ		VAR	IABLE RESISTOR				
R312 R313 R314 R315	1-249-409-11 1-249-441-11 1-249-413-11 1-249-407-11	CARBON CARBON CARBON CARBON	220 100K 470 150	5% 5% 5%	1/4W 1/4W 1/4W 1/4W	 	RV331	1-230-504-11)		
R316	1-249-407-11	CARBON	150	5%	1/4W			TRAM	ISFORMER				
R317 R318 R319 R320 R321	1-249-407-11 1-249-429-11 1-249-409-11 1-249-417-11 1-249-421-11	CARBON CARBON CARBON CARBON CARBON	150 10K 220 1K 2.2K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	 	T331	1-404-584-11 CRYS					
R322 R323	1-249-420-11 1-249-421-11	CARBON CARBON	1.8K 2.2K	5% 5%	1/4W 1/4W		X332	1-567-131-00	OSCILLATOR, CF	RYSTAL			
R324 R325 R326	1-249-426-11 1-249-429-11 1-249-419-11	CARBON CARBON CARBON	5.6K 10K 1.5K	5% 5% 5%	1/4W 1/4W 1/4W		YCM301	<u>YC M</u> 1-235-753-21	YC MODULE				
R327 R328 R329 R330 R331	1-249-427-11 1-249-397-11 1-249-397-11 1-249-397-11 1-249-418-11	CARBON CARBON CARBON CARBON CARBON	6.8K 22 22 22 1.2K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W			********** 1-625-208-11		*****	****	*****	*****
R333 R334 R335	1-249-401-11 1-249-412-11 1-249-408-11 1-249-415-11 1-249-418-11	CARBON CARBON CARBON CARBON CARBON	47 390 180 680 1.2K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		CNZ44 *1	1-564-881-11 1-564-881-11	PLUG, CONNECTO	R 4P			
R338 R344 R346	1-249-429-11 1-249-437-11 1-249-419-11	CARBON CARBON CARBON CARBON CARBON	5.1K 10K 47K 1.5K 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W				F2 BOARD	*****	****	*****	****
R349 R350 R351	1-249-415-11 1-249-415-11 1-249-409-11	CARBON CARBON CARBON CARBON CARBON	47K 680 680 220 330K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	[]]]	CNF262*1	<u>CONNI</u> -566-664-11 SWITC		4 P			
R353	1-247-891-00	CARBON	330K	5%	1/4W		\$1701 <u>A</u> .1	-571-410-11		AC POWE	R)(1	KEY)	r 4 1

The components identified by shading and mark Λ are critical for safety.

Replace only with part number specified.



Ref.No. Part No.	Description			Remark	Ref.No.	Part No.	Description			Remark
*1-625-199-11 <u>CA</u> F	F1 BOARD *******				C111 C112 C113 C114 C117	1-101-003-00 1-101-003-00 1-101-003-00 1-124-963-11 1-102-978-00	CERAMIC CERAMIC CERAMIC ELECT CERAMIC	0.0047MF 0.0047MF 0.0047MF 33MF 220PF	20% 5%	50V 50V 50V 16V 50V
C1601A.1-136-518-11 C1602A.1-136-519-11 C1603A.1-162-578-51 C1604A.1-162-578-51 C1605A.1-162-578-51	FILM CERAMIC	0.33MF 0.47MF 0.0047MF 0.0047MF 0.0047MF	20% 20% 20%	300V 300V 400V 400V 400V	C118 C119 C120 C121 C122	1-101-880-00 1-126-101-11 1-124-925-11 1-101-003-00 1-101-003-00	CERAMIC ELECT ELECT CERAMIC CERAMIC	47PF 100MF 2.2MF 0.0047MF 0.0047MF	5% 20% 20%	50V 16V 50V 50V 50V
C1606A.1=162=578=51	CERAMIC	0.0047MF	20%	400V	C123 C124 C125 C127	1-101-003-00 1-101-888-00 1-101-888-00 1-101-003-00	CERAMIC CERAMIC CERAMIC CERAMIC	0.0047MF 68PF 68PF 0.0047MF	5% 5%	50V 50V 50V 50V
CNF61 *1-566-664-11 CNF64 *1-506-349-21 CNF65 *1-508-765-00 CNF66 *1-508-786-00 CNF67 *1-560-290-00	PIN, CONNECT 3P PLUG (L) 3P PLUG (M) 2P PLUG (M) PLUG, CONNEC		YITCH)		C128 C129 C130 C131 C132 C133	1-124-963-11 1-101-888-00 1-101-004-00 1-101-006-00 1-124-499-11 1-101-003-00	CERAMIC CERAMIC CERAMIC CERAMIC ELECT CERAMIC	33MF 68PF 0.01MF 0.047MF 1MF 0.0047MF	20% 5% 20%	1.6V 50V 50V 50V 50V 50V
CNF162*1-506-347-21 FUS F1601A 1-532-350-11	FUSE, TIME-L		akada je j	, s estat i	C134 C135 C136 C137 C138	1-124-499-11 1-101-004-00 1-101-006-00 1-102-961-00 1-124-499-11	ELECT CERAMIC CERAMIC CERAMIC ELECT	1MF 0.01MF 0.047MF 27PF 1MF	20% 5% 20%	50V 50V 50V 50V 50V
FIL LF1601 <u>A</u> ,1-421-866-12	TER	;F1601 航海() ((())			C139 C140 C141 C142 C143	1-123-875-11 1-108-614-91 1-129-794-00 1-102-816-00 1-101-361-00	ELECT MYLAR FILM CERAMIC CERAMIC	10MF 0.001MF 0.0033MF 120PF 150PF	20% 10% 2% 5%	50V 100V 100V 50V 50V
RESTRICT AND A STREET OF THE S	SISTOR	100k 5%	10. 1740 (C144 C145 C146 C147 C148	1-124-477-11 1-124-477-11 1-124-477-11 1-124-477-11 1-123-875-11	ELECT ELECT ELECT ELECT ELECT	47MF 47MF 47MF 47MF 10MF	20% 20% 20% 20% 20%	16V 16V 16V 16V 50V
R1602A.1-244-945-91 R1603A.1-217-328-11 R1604A.1-247-879-91 R1605A.1-247-289-11	CARBON WIREWOUND CARBON CARBON	1M 5% 2.7 10% 100K 5% 8.2M 5%	1/2W	F	C149 C150 C151 C152 C153	1-136-153-00	FILM FILM ELECT ELECT FILM	0.01MF 0.01MF 22MF 22MF 0.1MF	5% 5% 20% 20% 5%	50V 50V 50V 50V 50V
	ERMISTOR THERMISTOR (POSITIVE)	\$\$+\$\$\}	. Military	C154 C155 C156 C157 C158	1-136-169-00 1-124-963-11 1-136-157-00 1-136-161-00 1-124-963-11	FILM ELECT FILM FILM ELECT	0.22MF 33MF 0.022MF 0.047MF 33MF	5% 20% 5% 5% 20%	50V 16V 50V 50V 16V
*A-1296-317-A *4-380-698-01 *4-380-699-01		PLETE ***** SHIELD, Al			C159 C161 C162 C163 C164	1-124-477-11 1-124-477-11 1-102-816-00 1-124-927-11 1-110-190-81	ELECT ELECT CERAMIC ELECT MYLAR	47MF 47MF 120PF 4.7MF 0.01MF	20% 20% 5% 20% 10%	16V 16V 50V 50V 400V
*4-382-701-01	CASE (BOTTOM	LIDÍ, SHIÈL	Ď, A2		C165 C167 C168 C169 C170	1-130-853-00 1-124-499-11 1-110-179-81 1-123-875-11 1-101-004-00	FILM ELECT MYLAR ELECT CERAMIC	0.0047MF 1MF 0.22MF 10MF 0.01MF	5% 20% 10% 20%	50V 50V 100V 50V 50V
C101 1-124-908-11 C102 1-126-103-11 C103 1-110-175-81 C104 1-110-173-81 C105 1-110-173-81	ELECT MYLAR MYLAR	22MF 470MF 0.1MF 0.068MF 0.068MF	10% 10%	50V 16V 100V 100V 100V	 C171 C174 C177 C187 C188	1-101-004-00 1-124-499-11 1-102-119-00 1-101-003-00 1-124-963-11	CERAMIC ELECT CERAMIC CERAMIC ELECT	0.01MF 1MF 0.0015MF 0.0047MF 33MF	20% 10% 20%	50V 50V 50V 50V 16V
C106 1-101-004-00 C107 1-102-963-00 C108 1-124-963-11 C109 1-101-003-00 C110 1-124-499-11	CERAMIC CERAMIC ELECT CERAMIC ELECT	0.01MF 33PF 33MF 0.0047MF 1MF		50V 50V 16V 50V 50V	 C189 C190	1-124-963-11 1-110-175-81	ELECT MYLAR	33MF 0.1MF	20% 10%	16V 100V



_											
	Ref.No	. Part No.	Description	Remark	Ref.No.	Part No.	Description				Remark
	CD101 CD102 CD103	1-404-750-11 1-404-745-11	DISCRIMINATOR, CERAMIC		R105 R106 R107 R108	1-249-418-11 1-247-891-00 1-249-421-11 1-249-421-11	CARBON CARBON CARBON	1.2K 330K 2.2K 2.2K	5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
	CF101 CF103	1-404-134-00 1-527-840-00	DISCRIMINATOR, CERAMIC TRAP, CERAMIC (5.5MHZ) FILTER, CERAMIC		R109 R110 R111	1-249-423-11 1-249-412-11 1-249-418-11	CARBON	3.3K 390 1.2K	5% 5% 5%	1/4W 1/4W 1/4W	
	CF104 CF105 SWF10	1-527-839-00	FILTER, CERAMIC FILTER, CERAMIC FILTER, SURFACE WAVE		R112 R113 R114	1-249-421-11 1-249-411-11 1-249-413-11	CARBON CARBON	2.2K 330 470	5% 5% 5%	1/4W 1/4W 1/4W	
		CON	NECTOR		R115 R116	1-249-413-11 1-249-419-11	CARBON	470 1.5K	5% 5%	1/4W 1/4W	
	CNA11	*1-566-659-11	CONNECTOR, HINGE (SOCK	ET) 18P	R117 R118 R119	1-249-431-11 1-249-425-11 1-249-417-11	CARBON	15K 4.7K 1K	5% 5% 5%	1/4W 1/4W 1/4W	
		DIO	<u>DE</u>		R121	1-249-429-11		10K	5%	1/4W	
	D105 D106 D108	8-719-911-19	DIODE RD6.2ES-B1 DIODE 1SS119 DIODE MC921		R122 R123 R124 R125	1-249-436-11 1-249-417-11 1-249-423-11 1-249-429-11	CARBON	39K 1K 3.3K 10K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
		IC			R126 R127	1-249-436-11 1-249-432-11	CARBON CARBON	39K 18K	5% 5%	1/4W 1/4W	
		8-759-909-08	IC TDA3541		R128 R129	1-249-432-11 1-249-429-11	CARBON CARBON	18K 10K	5% 5%	1/4W 1/4W	
	IC102 IC103 IC104	8-759-013-18	IC TDA2556 IC TDA6600		R130	1-249-429-11		10K	5%	1/4W	
	IC104	8-759-946-99 8-759-003-90	IC TDA2595~V7 IC TBA129		R132 R133	1-249-414-11	CARBON CARBON	560 4.7K		1/4W 1/4W	
		COI	1		R134 R135 R136	1-249-414-11 1-249-419-11 1-249-414-11	CARBON CARBON CARBON	560 1.5K 560	5% 5% 5%	1/4W 1/4W	
	L101	1-408-226-00	-		 R137	1-249-414-11	CARBON	560	5%	1/4W 1/4W	
	L102 L103	1-410-116-11	INDUCTOR 560UH INDUCTOR 5.6UH		R138 R140	1-249-419-11	CARBON CARBON	1.5K 100K		1/4W 1/4W	
	L 104 L 105	1-408-411-00 1-410-482-31	INDUCTOR 15UH INDUCTOR 100UH		R141 R142	1-249-425-11 1-249-441-11	CARBON CARBON	4.7K 100K	5% 5%	1/4W 1/4W	
	L106 L107	1-410-476-11 1-410-467-21	INDUCTOR 33UH INDUCTOR 5.6UH		R143	1-249-441-11	CARBON	100K	5%	1/4W	
	L108 L109	1-410-473-11 1-410-473-11	INDUCTOR 18UH INDUCTOR 18UH		R144 R146	1-249-422-11	CARBON CARBON	3.9K	5% 5%	1/4W 1/4W	
	1110	1-410-064-11	INDUCTOR 180H		R148 R150	1-249-413-11 1-249-423-11	CARBON CARBON	470 3.3K	5% 5%	1/4W 1/4W	
	L111 L112	1-410-482-31 1-410-471-11	INDUCTOR 100UH INDUCTOR 12UH		R151 R152	1-249-423-11 1-249-431-11	CARBON CARBON	3.3K 15K	5% 5%	1/4W 1/4W	
	L113	1-410-460-11	INDUCTOR 1.5UH		R153	1-249-416-11 1-249-441-11	CARBON	820 100K	5%	1/4W 1/4W	
		TRA	NSISTOR		R155 	1-249-430-11	CARBON	12K	5%	1/4W	
	Q101 Q102	8-729-900-61 8-729-900-61	TRANSISTOR DTA114ES TRANSISTOR DTA114ES		R156	1-247-881-00	CARBON CARBON	120K 1K	5% 5%	1/4W 1/4W	
	0104 0105	8-729-900-61 8-729-178-54	TRANSISTOR DTA114ES TRANSISTOR 2SC2785		R162 R163	1-249-415-11	CARBON CARBON	680 3.9K	5% 5%	1/4W 1/4W	
	Q106	8-729-178-54	TRANSISTOR 2SC2785		R165 R166	1-249-423-11	CARBON	3.3K 47K	5% 5%	1/4W	
	Q107 Q108	8-729-117-54 8-729-900-65	TRANSISTOR 2SA1175 TRANSISTOR DTA144ES		R172 R173	1-249-417-11	CARBON CARBON	1K 560	5% 5%	1/4W 1/4W 1/4W	
	Q109 Q110	8-729-900-89 8-729-117-54	TRANSISTOR DTC144ES TRANSISTOR 2SA1175		R188 R189	1-249-419-11 1-249-419-11	CARBON CARBON	1.5K 1.5K	5%	1/4W 1/4W	
	Q111	8-729-900-89	TRANSISTOR DTC144ES					- • - • •	-,,	,	
	Q112 Q113	8-729-178-54 8-729-178-54	TRANSISTOR 2SC2785 TRANSISTOR 2SC2785		pv]n1		ABLE RESISTOR	ON 471			
		RES	ISTOR		RV 102	1-237-751-11	RES, ADJ, CARE RES, ADJ, CARE RES, ADJ, CARE	ON 10k			
	R101 R102	1-249-405-11 1-249-423-11	CARBON 100 5% CARBON 3.3K 5%	1/4W 1/4W		TDAL	ISEODMED				
	R103 R104	1-249-433-11 1-249-429-11	CARBON 22K 5% CARBON 10K 5%	1/4W 1/4W	T101	1-404-493-00	COIL				
							-				

The components identified by shading and mark \triangle are critical for safety.

Replace only with part number specified.



Ref.No. Part No.	Description			Remark	Ref.No.	Part No.	Description				Remark
T102 1-404-493-00 T103 1-404-493-00						TRA	NSISTOR				
1103 1-404-493-00	COIL				Q702 0703	8-729-178-54 8-729-326-11	TRANSISTOR 2S TRANSISTOR 2S				
TUN	IER				0704 0705	8-729-200-17 8-729-178-54	TRANSISTOR 2S TRANSISTOR 2S	A1091			
TU101▲1-463-881-11	TUNER, ET (UV-617)	NAS SE			8-729-326-11	TRANSISTOR 2S				
******	*****	*****	*****	******	Q707 Q708	8-729-200-17 8-729-178-54	TRANSISTOR 2S TRANSISTOR 2S				
*A-1330-849-A	C BOARD, CO				0709 0710	8-729-326-11 8-729-200-17	TRANSISTOR 2S TRANSISTOR 2S	C2611			
*4-379-160-01 *4-379-167-01 *4-386-664-01	COVER (REAR COVER (MAIN SPRING				 	RES	ISTOR				
PA)	PACITOR				R704 R705 R706	1-216-486-00 1-202-824-00 1-249-409-11	METAL OXIDE SOLID CARBON	8.2K 3.3K 220	5% 10% 5%	3W 1/2W 1/4W	F
C703 1-102-980-00		270PF	5%	50V	R707 R708	1-249-412-11 1-249-401-11	CARBON CARBON	390 47	5% 5%	1/4W 1/4W	
C704 1-102-116-00 C705 1-102-978-00	CERAMIC CERAMIC	680PF 220PF	10% 5%	50V 50V	R709	1-202-844-00	SOL ID	330K	10%	1/2W	
C706 1-102-116-00 C707 1-162-116-00	CERAMIC CERAMIC	680 PF 680 PF	10% 10%	50V 2KV	R710 R712	1-215-465-00 1-249-417-11	METAL CARBON	68K 1K	1% 5%	1/6W 1/4W	
C708 1-162-114-00	CERAMIC	0.0047MF		2KV	R713 R714	1-215-471-00 1-216-486-00	METAL OXIDE	120K 8.2K		1/6W 3W	F
C709 1-102-116-00 C710 1-123-947-00	CERAMIC ELECT	680PF 10MF	10% 20%	50V 250V	R715	1-202-824-00	SOL ID	3.3K	10%	1/2W	
C711 1-101-880-00 C712 1-102-980-00	CERAMIC CERAMIC	47PF 270PF	5 % 5 %	50V 50V	R716	1-249-409-11	CARBON CARBON	220 680	5% 5%	1/4W 1/4W	
C714 1-124-360-00	ELECT	1000MF	20%	16V	R718 R719	1-202-814-11 1-249-401-11	SOL ID CARBON	33K 47	10% 5%	1/2W 1/4W	
C716 (1-162-583-11 C717 1-102-114-00		330PF 470PF	10%	400V 50V	R720	1-249-423-11	CARBON	3.3K	5%	1/4W	
C718 1-102-114-00 C719 1-102-114-00	CERAMIC CERAMIC	470PF 470PF	10% 10%	50V 50V	R721 R722	1-202-842-11	SOL ID		10% 10%	1/2W 1/2W	
0.01	UNECTOR				R723	1-249-417-11 1-202-846-00	CARBON SOL ID	1K 470K	5% 10%	1/4W 1/2W	
	NECTOR				R725	1-202-838-00 1-202-824-00	SOL ID	100K 3.3K	10% 10%	1/2W	
CNC71 *1-506-371-00 CNC72 *1-564-883-11 CNC81 *1-560-123-00	PLUG, CONNE	CTOR 6P	חודרט/		R726 R727 R728	1-249-409-11	SOL ID CARBON METAL OX IDE	220	5% 5%	1/2W 1/4W 1W	F
CNC82 *1-508-765-00		CTOR (2.5MM	PIICH)		R729	1-249-416-11	CARBON	820	5%	1/4W	Γ
DI	ODE				R730 R731	1-249-401-11 1-249-423-11	CARBON CARBON	47 3.3K	5% 5%	1/4W 1/4W	
0701 8-719-110-14		FS-B3			R732 R733	1-249-415-11 1-249-415-11	CARBON CARBON	680 680	5% 5%	1/4W 1/4W	
D702 8-719-911-19 D703 8-719-911-19	DIODE 1SS11	9			R734	1-249-405-11	CARBON	100	5%	1/4W	
D704 8-719-911-19	DIODE 1SS11 DIODE 1SS11	9				1-215-493-00 1-216-486-00		1M 8.2K	1% 5%	1/6W 3W	F
D706 8-719-911-19					R737	1-215-481-00 1-249-417-11	METAL	330K 1K		1/6W 1/4W	
D707 8-719-911-19 D708 8-719-911-19	DIODE 1SS11 DIODE 1SS11				İ						
D709 8-719-911-19 D710 8-719-911-19						VAR	IABLE RESISTOR	3			
	DIODE ERC24	-06S			RV702	1-226-114-00 1-230-619-11	RES, ADJ, MET	TAL GLA	ZE 110		
D713 8-719-911-19	DIODE 1SS11	.9				1-237-749-11 1-237-749-11					
JA	CK				 *****	*****	*****	*****	****	*****	*****
J701 1-526-798-51	SOCKET, CRT					*A-1345-720-A					
	*•				!	+A 9A1 7F1 01	*****	****			
<u>CO</u>		22			į	*4-341-751-01 *4-341-751-01	PAWL				
L704 1-410-878-21	INDUCTOR	33UH			i	*4-341-752-01	FAEFEL				



The components identified by shading and mark \triangle are critical for safety.

Replace only with part number specified.

Ref.No.	Part No.	Description			Remark	Ref.No.	Part No.	Description			Remark
	CAP	ACITOR				C523	1-108-614-91	MYLAR	0.001MF	10%	100V
C001 C003 C004 C005	1-102-973-00 1-110-175-81 1-123-875-11 1-102-074-00	CERAMIC MYLAR ELECT CERAMIC	100 PF 0.1MF 10MF 0.001MF	5% 10% 20% 10%	50V 100V 50V 50V	C524 C525 C526 C527	1-106-355-12 1-102-973-00 1-102-947-00 1-110-175-81	MYLAR CERAMIC CERAMIC MYLAR	0.0033MF 100PF 10PF 0.1MF	5% 5% 0.5PF 10%	50V 50V 50V 100V
C007 C008 C009 C010 C011	1-110-171-81 1-101-880-00 1-101-884-00 1-126-101-11 1-101-004-00	MYLAR CERAMIC CERAMIC ELECT CERAMIC	0.047MF 47PF 56PF 100MF 0.01MF	10% 5% 5% 20%	100 V 50 V 50 V 16 V 50 V	C536	1-124-117-00 1-124-122-11 1-110-173-81 1-124-120-11 1-131-365-00	ELECT ELECT MYLAR ELECT TANTALUM	680MF 100MF 0.068MF 220MF 10MF	10% 20% 10% 20% 10%	25V 50V 100V 16V 16V
C012 C013 C014 C015 C016	1-126-101-11 1-101-004-00 1-124-463-00 1-126-101-11 1-101-004-00	ELECT CERAMIC ELECT ELECT CERAMIC	100MF 0.01MF 0.1MF 100MF 0.01MF	20% 20% 20%	16V 50V 50V 16V 50V	C537 C538 C539 C591 C592	1-124-499-11 1-108-614-91 1-102-820-00 1-123-875-11 1-124-477-11	ELECT MYLAR CERAMIC ELECT ELECT	1MF 0.001MF 330PF 10MF 47MF	20% 10% 5% 20% 20%	50V 100V 50V 50V 16V
C017 C018 C019 C020 C021	1-123-875-11 1-102-980-00 1-110-171-81 1-102-973-00 1-102-973-00	ELECT CERAMIC MYLAR CERAMIC CERAMIC	10MF 270PF 0.047MF 100PF 100PF	20% 5% 10% 5% 5%	50V 50V 100V 50V 50V	C593 C601 C602 C603 C604	1-102-820-00 1-161-964-00 1-161-964-00 1-161-964-00 1-125-318-00	CERAMIC CERAMIC CERAMIC CERAMIC ELECT(BLOCK)	330 PF 0.0047MF 0.0047MF 0.0047MF 220MF	5% 20%	50V 250V 250V 250V 400V
C022 C023 C024 C025 C026	1-124-477-11 1-124-499-11 1-124-499-11 1-102-125-00 1-102-125-00	ELECT ELECT ELECT CERAMIC CERAMIC	47MF 1MF 1MF 0.0047MF 0.0047MF	20% 20% 20% 10%	16V 50V 50V 50V 50V	C605 C606 C607 C608 C611	1-124-122-11 1-110-175-81 1-130-019-00 1-123-875-11 1-124-122-11	ELECT MYLAR FILM ELECT ELECT	100MF 0.1MF 0.0012MF 10MF 100MF	20% 10% 5% 20% 20%	50V 100V 50V 50V 50V
C027 C028 C029 C251 C252	1-110-175-81 1-101-361-00 1-102-121-00 1-124-927-11 1-124-927-11	MYLAR CERAMIC CERAMIC ELECT ELECT	0.1MF 150PF 0.0022MF 4.7MF 4.7MF	10% 5% 10% 20%	100 V 50 V 50 V 50 V 50 V	C612 C613 C614 C615 C616	1-162-115-00 1-136-088-00 1-102-030-00 1-124-557-11 1-102-030-00	CERAMIC FILM CERAMIC ELECT CERAMIC	330 PF 0.0022MF 330 PF 1000MF 330 PF	10% 3% 10% 20% 10%	2KV 2KV 500V 25V 500V
C253 C254 C255 C256 C257	1-124-122-11 1-124-927-11 1-124-927-11 1-110-175-81 1-101-004-00	ELECT ELECT ELECT MYLAR CERAMIC	100MF 4.7MF 4.7MF 0.1MF 0.01MF	20% 20% 20% 10%	50V 50V 50V 100V 50V	C618 C619 C620 C621 C622	1-124-637-11 1-124-556-11 1-102-074-00 1-124-347-00 1-124-556-11	ELECT ELECT CERAMIC ELECT ELECT	1000MF 2200MF 0.001MF 100MF 2200MF	20% 20% 10% 20% 20%	50V 16V 50V 160V 16V
	1-110-175-81 1-110-175-81 1-102-074-00 1-102-074-00 1-124-477-11	MYLAR MYLAR CERAMIC CERAMIC ELECT	0.1MF 0.1MF 0.001MF 0.001MF 47MF	10% 10% 10% 10% 20%	100 V 100 V 50 V 50 V 16 V	C623 C624 C625 C626 C627	1-124-910-11 1-124-122-11 1-124-360-00 1-123-875-11 1-102-074-00	ELECT ELECT ELECT ELECT CERAMIC	47MF 100MF 1000MF 10MF 0.001MF	20% 20% 20% 20% 10%	50V 50V 16V 50V 50V
C403 C501 C502 C503 C504	1-124-477-11 1-124-927-11 1-124-927-11 1-110-192-81 1-101-361-00	ELECT ELECT ELECT MYLAR CERAMIC	47MF 4.7MF 4.7MF 0.015MF 150PF	20% 20% 20% 10% 5%	16V 50V 50V 400V 50V	C628 C631 C632 C633 C636	1-124-360-00 1-124-927-11 1-102-074-00 1-124-927-11 1-123-258-91	ELECT ELECT CERAMIC ELECT ELECT	1000MF 4.7MF 0.001MF 4.7MF 3.3MF	20% 20% 10% 20% 20%	16V 50V 50V 50V 50V
C508	1-108-794-91 1-110-182-81 1-110-327-81 1-110-182-81 1-110-175-81	MYLAR MYLAR MYLAR MYLAR MYLAR	0.0015MF 0.022MF 0.33MF 0.022MF 0.1MF	5% 10% 10% 10%	50V 250V 100V 250V 100V	C801 C802 C804 C805 C806	1-126-105-11 1-102-030-00 1-123-948-00 1-162-114-00 1-110-175-81	ELECT CERAMIC ELECT CERAMIC MYLAR	1000MF 330PF 22MF 0.0047MF 0.1MF	20% 10% 20%	35 V 500 V 250 V 2K V 100 V
C511 C512 C513	1-161-959-00 1-108-620-91 1-110-175-81 1-108-614-91 1-110-179-81	CERAMIC MYLAR MYLAR MYLAR MYLAR MYLAR	22PF 0.0033MF 0.1MF 0.001MF 0.22MF	10% 10% 10% 10% 10%	500V 100V 100V 100V 100V	C811 C812	1-106-395-00 1-123-024-00 1-136-117-00 1-123-943-00 1-102-212-00	MYLAR ELECT FILM ELECT CERAMIC	0.15MF 33MF 2MF 1MF 820PF	10% 5% 20% 10%	200V 160V 200V 250V 500V
C517 C518	1-124-499-11 1-108-614-91 1-124-252-00 1-124-902-00 1-136-173-00	ELECT MYLAR ELECT ELECT FILM	1MF 0.001MF 0.33MF 0.47MF 0.47MF	20% 10% 20% 20% 5%	50V 100V 50V 50V 50V	C817 C818	1-161-731-00 1-136-116-00 1-136-565-11 1-129-721-00 1-161-731-11	CERAMIC FILM FILM FILM CERAMIC	0.001MF 1MF 0.015MF 0.039MF 0.001MF	10% 5% 3% 10% 10%	2KV 200V 1.4KV 630V 2KV
C520 C521	1-102-121-00 1-110-175-81 1-124-122-11	CERAMIC MYLAR ELECT	0.0022MF 0.1MF 100MF	10% 10% 20%	50V 100V 50V	C821 A. C822 C823	1-110-189-81 1-162-116-51 1-102-114-00 1-110-186-81 1-102-212-00	MYLAR CERAMIC CERAMIC MYLAR CERAMIC	0.0082MF 680PF 470PF 0.0047MF 820PF	10% 10% 10% 10% 10%	400V 2KV 50V 400V 500V

The components identified by shading and mark $ilde{\Delta}$ are critical for safety.

Replace only with part number specified.



Ref.No.	Part No.	Description		Remark	Ref.No.	Part No.	Description	Remark
C825 C826	1-110-182-81 1-123-875-11 FIL	ELECT 10MF	10% 20%	250V 50V	D613 D614 D615 D616 D617	8-719-924-06 8-719-924-06 8-719-109-90 8-719-109-93 8-719-109-93	DIODE ERC24-06S DIODE RD5.6ES-B3	
	1-567-888-11	OSCILLATOR, CERAMIC OSCILLATOR, CERAMIC			D618 D619 D620	8-719-109-89 8-719-109-89 8-719-000-12 8-719-000-12	DIODE MC931	
	CON	NECTOR			D622 	8-719-911-19	DIODE 188119	
CND01 CND02 CND11	*1-508-765-00 *1-564-884-11 *1-564-886-11 *1-566-660-11 *1-564-884-21	3P PLUG (M) PLUG, CONNECTOR 7P PLUG, CONNECTOR 9P CONNECTOR, HINGE (PL PLUG, CONNECTOR 7P	UG) 18P		D623 D624 D627 D630 D632	8-719-911-19 8-719-911-19 8-719-911-19 8-719-110-39 8-719-110-16	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE RD15ES-B1 DIODE RD10ES-B1	
CND23 CND31 CND41	*1-564-346-00 *1-560-124-00 *1-564-346-00 *1-566-367-11 *1-564-882-11	CONNECTOR, BOARD TO PLUG, CONNECTOR (2.5 CONNECTOR, BOARD TO CONNECTOR, HINGE (RE PLUG, CONNECTOR 5P	MM PITCH) BOARD 18P		D633 D801 D802 D803 D804	8-719-911-19 8-719-924-06 8-719-924-06 8-719-300-65 8-719-911-55	DIODE 1SS119 DIODE ERC24-06S DIODE ERC24-06S DIODE ES1F DIODE U05G	
CND64 CND68 CND82	*1-566-367-11 *1-506-349-21 *1-564-879-11 *1-508-765-00 *1-508-786-00	CONNECTOR, HINGE (RE 3P PLUG (L) PLUG, CONNECTOR 2P 3P PLUG (M) 2P PLUG (M)	CEPTACLE)		D805 D806 D807 D808 D809	8-719-911-55 8-719-945-80 8-719-945-80 8-719-928-08 8-719-924-06	DIODE ERCO6-15S	
	*1-564-038-00 *1-560-123-00	CONNECTOR PLUG, DY (PLUG, CONNECTOR (2.5						
CND92	*1-560-125-00 *1-560-123-00	PLUG, CONNECTOR (2.5	MM) 5P		IC002	8-759-971-68	IC M50436-614SP IC M888503H-597G	
	DIO	DE			IC004	8-759-603-41 8-759-157-40	IC UPC574J	
D001 D002 D003 D004 D005	8-719-911-19 8-719-911-19 8-719-911-19 8-719-911-19 8-719-109-71				 IC401 IC501 IC502	8-759-803-31 *4-368-683-01 8-759-913-13 8-759-970-73 8-759-944-57 8-759-946-23	SPRING; IC251 IC CX20061 IC TEA2028B IC TDA8170	
D007 D008	8-719-109-89 8-719-110-85	DIODE RD5.6ES-B2 DIODE RD36ES-B4					HEAT SINK, IC: IC601	
D009 D011 D012	8-719-109-89 8-719-911-19 8-719-911-19	DIODE RD5.6ES-B2 DIODE 1SS119 DIODE 1SS119				<u>C01</u>	,	
D254 D501 D504 D506 D508	8-719-110-14 8-719-911-19 8-719-911-55 8-719-000-12 8-719-911-19	DIODE RD9.1ES-B3 DIODE 1SS119 DIODE U056 DIODE MC931 DIODE 1SS119			L001 L501 L601 L602 L603	*1-420-872-00 1-410-396-41	INDUCTOR 27UH INDUCTOR 3.3UH COIL, AIR CORE FERRITE BEAD INDUCTOR FERRITE BEAD INDUCTOR	
D509 D511 D512 D513 D591	8-719-911-19 8-719-911-55 8-719-911-55 8-719-109-81 8-719-911-19	DIODE 1SS119 DIODE U05G DIODE U05G DIODE RD4.7ES-B2 DIODE 1SS119			L605 L606 L607 L803 L804	1-459-442-00 1-421-013-00 1-410-482-31 1-459-104-00 1-408-239-00	COIL, (HOLIZONTAL CHOKE) INDUCTOR 100UH	25U)
D592 D593 D601 D602 D603	8-719-911-19 8-719-911-19 8-719-946-90 8-719-924-06 8-719-911-55	DIODE 1SS119 DIODE 1SS119 DIODE KBU4JL-6088 DIODE ERC24-06S DIODE U05G			L806 L807 L809	1-459-652-11 1-459-115-00 1-408-242-00 *1-420-872-00 1-421-982-11	COIL, DCC-H INDUCTOR 10MMH COIL, AIR CORE	
D604 D605 D606 D607 D608	8-719-911-55 8-719-911-55 8-719-924-06 8-719-924-06 8-719-925-06	DIODE U05G DIODE U05G DIODE ERC24-06S DIODE ERC24-06S DIODE ERC25-06S			 PS601 <u>A</u> PS602 <u>A</u>	<u>IC</u> 1-532-984-91 1-532-675-91	LINK LINK, IC LINK, IC	
D610 D611 D612	8-719-300-59 8-719-928-08 8-719-300-59	DIODE CTU-12S DIODE ERD28-06S DIODE CTU-12S			! 			



Ref.No. Part No.	Description	Remark	Ref. No	. Part No.	Description				Remark
TR	ANSISTOR		R034	1-249-413-11	CARBON	470	5%	1/4W	
-	· · · · · · · · · · · · · · · · · · ·		R035	1-249-431-11		15K	5%	1/4W	
Q001 8-729-178-54			R036	1-249-421-11		2.2K		1/4W	
Q002 8-729-117-54	TRANSISTOR 2SA1175		R037	1-249-417-11	CARBON	1K	5%	1/4W	
0003 8-729-117-54			R038	1-249-417-11	CARBON	1K	5%	1/4W	
Q004 8-729-117-54			1				- /-	-,	
Q252 8-729-900-36	TRANSISTOR DTC124ES		R039	1-249-417-11	CARBON	1K	5%	1/4W	
Q501 8-729-117-54	TRANSISTOR OSALITE		R040	1-249-417-11	CARBON	1K	5%	1/4W	
Q501 8-729-117-54 Q502 8-729-117-54	TRANSISTOR 2SA1175 TRANSISTOR 2SA1175		R041	1-249-417-11	CARBON	1K	5%	1/4W	
Q503 8-729-178-54			R042 R043	1-249-417-11 1-249-417-11	CARBON	1K	5%	1/4W	
Q505 8-729-177-43			1 1043	1-249-41/-11	CARBON	1K	5%	1/4W	
Q506 8-729-103-43			R044	1-249-429-11	CARBON	10K	5%	1/4W	
			R045	1-249-417-11	CARBON	1K	5%	1/4W	
0507 8-729-117-54			R046	1-249-429-11	CARBON	10K	5%	1/4W	
Q591 8-729-178-54			R048	1-249-417-11	CARBON	1K	5%	1/4W	
Q598 8-729-178-54 Q601 8-729-904-32			R049	1-249-417-11	CARBON	1K	5%	1/4W	
Q602 8-729-209-02	TRANSISTOR 2SD1548-LB		R050	1 240 422 11	CADDON	004	F-4	1.44	
Q001 0 123 203 0E	TRAISISTOR ESDISTO-LB		R051	1-249-433-11 1-249-429-11	CARBON CARBON	22K	5%	1/4W	
*4-368-683-01	SPRING; Q602		R052	1-249-439-11	CARBON	10K 68K	5% 5%	1/4W	
Q603 8-729-904-32	TRANSISTOR 2SB1185-E		R053	1-249-437-11	CARBON	47K	5%	1/4W 1/4W	
Q604 8-729-308 - 92			R054	1-249-417-11	CARBON	1K	5%	1/4W	
Q605 8-729-178-54			i			-11	J 76	1/ TH	
Q606 8-729-178-54	TRANSISTOR 2SC2785		R056	1-249-440-11	CARBON	82K	5%	1/4W	
0607 8-729-904-27	TRANSISTOR OSRIJET F		R057	1-249-409-11	CARBON	220	5%	1/4W	
Q607 8-729-904-27 Q608 8-729-904-27			R058	1-249-409-11	CARBON	220	5%	1/4W	
*4-368-683-01	TRANSISTOR 2SD1761-E SPRING; Q608		R059	1-249-435-11	CARBON	33K	5%	1/4W	
Q609 8-729-378-91	TRANSISTOR 2SD789-4		R060	1-249-436-11	CARBON	39K	5%	1/4W	
Q801 8-729-178-54	TRANSISTOR 2SC2785		R061	1-249-417-11	CARBON	1K	5%	1/4W	
			R062	1-249-411-11	CARBON	330	5%	1/4W	
Q804 8-729-304-50			R063	1-249-431-11	CARBON	15K	5%	1/4W	
*4-368-683-01	SPRING; Q804		R064	1-249-429-11	CARBON	10K	5%	1/4W	
Q805 8-729-168-82	TRANSISTOR 2SC2688		R067	1-249-413-11	CARBON	470	5%	1/4W	
			1 0060	1 040 401 11	04.00.011		F 44		
RF	SISTOR		R068	1-249-421-11	CARBON	2.2K	5%	1/4W	
NEC.	31370K		J R070	1-249-423-11 1-249-417-11	CARBON	3.3K	5%	1/4W	
ROO1 1-249-417-11	CARBON 1K 5% 1/4	W	R071	1-249-417-11	CARBON CARBON	1K 1K	5% 5%	1/4W 1/4W	
R002 1-249-417-11	CARBON 1K 5% 1/4		R072	1-249-417-11	CARBON	1K	5%	1/4W	
R003 1-249-417-11	CARBON 1K 5% 1/4	W	i		5/11/5011	-11	0,0	1/ 7H	
R004 1-249-417-11	CARBON 1K 5% 1/4		R073	1-249-417-11	CARBON	1ĸ	5%	1/4W	
R005 1-249-411-11	CARBON 330 5% 1/4	W	R074	1-249-417-11	CARBON	1K	5%	1/4W	
R006 1-249-417-11	CARBON 1K 5% 1/4	IJ	R075	1-249-417-11	CARBON	1K	5%	1/4W	
R007 1-249-405-11	CARBON 100 5% 1/4		R078	1-249-413-11 1-249-423-11	CARBON CARBON	470 3.3K	5%	1/4W	
R008 1-249-417-11	CARBON 1K 5% 1/4		1070	1-243-423-11	CARBON	3.38	5%	1/4W	
R009 1-249-417-11	CARBON 1K 5% 1/4		R079	1-249-435-11	CARBON	33K	5%	1/4W	
R010 1-249-413-11	CARBON 470 5% 1/4	W	R080	1-249-429-11	CARBON	10K	5%	1/4W	
R011 1-249-417-11	CADDON 14 FW 144		R081	1-249-441-11	CARBON	100K		1/4W	
R011 1 -249-417-11 R012 1 -249-417-11			R083	1-249-429-11		10K		1/4W	
R013 1-249-417-11	CARBON 1K 5% 1/4 CARBON 1K 5% 1/4		R084	1-249-413-11	CARBON	470	5%	1/4W	
R014 1-249-417-11	CARBON 1K 5% 1/4		R085	1-249-429-11	CARBON	104	E 0/	1 //11	
R016 1-249-429-11	CARBON 10K 5% 1/4		R086	1-249-417-11	CARBON	10K 1K	5% 5%	1/4W 1/4W	
0017			R087	1-249-417-11	CARBON	îĸ	5%	1/4W	
R017 1-249-417-11 R018 1-249-417-11	CARBON 1K 5% 1/4		R088	1-249-425-11	CARBON	4.7K	5%	1/4W	
R018 1 -249-417-11 R019 1 -249-433-11	CARBON 1K 5% 1/4		R090	1-249-413-11	CARBON	470	5%	1/4W	
R020 1-249-433-11	CARBON 22K 5% 1/4								
R021 1-249-433-11	CARBON 22K 5% 1/4 CARBON 22K 5% 1/4		R091	1-249-409-11	CARBON	220	5%	1/4W	
	CARDON 22R 3/8 1/4	W	R093 R094	1-249-429-11 1-249-429-11	CARBON	10K	5%	1/4W	
R022 1-249-433-11	CARBON 22K 5% 1/4	W	R095	1-249-409-11	CARBON CARBON	10K 220	5%	1/4W	
R023 1-249-429-11	CARBON 10K 5% 1/4		R096	1-249-409-11	CARBON	220	5% 5%	1/4W 1/4W	
R024 1-249-429-11	CARBON 10K 5% 1/4		ĺ				J 76	±/ 7R	
R025 1-249-417-11 R026 1-249-417-11	CARBON 1K 5% 1/4		R097	1-249-429-11	CARBON	10K	5%	1/4W	
R026 1-249-417-11	CARBON 1K 5% 1/4	W	R098	1-249-429-11	CARBON	10K	5%	1/4W	
R027 1-249-417-11	CARBON 1K 5% 1/4	Li	R099 R251	1-215-900-11	METAL OX IDE	22K	5%	2W F	
R028 1-249-417-11	CARBON 1K 5% 1/4		R251	1-249-417-11 1-249-413-11	CARBON	1K	5%	1/4W	
R029 1-249-417-11	CARBON 1K 5% 1/4				CARBON	470	5%	1/4W	
R030 1 - 249 - 425 - 11	CARBON 4.7K 5% 1/4	W	R253	1-249-413-11	CARBON	470	5%	1/4W	
R031 1-249-429-11	CARBON 10K 5% 1/4	W	R255	1-249-385-11	CARBON	2.2	5%	1/4W F	
R032 1-249-417-11	CAPRON 14 Ew 144		R256	1-249-385-11	CARBON	2.2	5%	1/4W F	
R033 1-249-413-11	CARBON 1K 5% 1/4 CARBON 470 5% 1/4		R260	1-249-393-11	CARBON	10	5%	1/4W	
245-415-11	CARBON 470 5% 1/4	M	R261	1-249-429-11	CARBON	10K	5%	1/4W	



Ref.No.	Part No.	Description				Remark	Ref.No.	Part No.	Description				Remark
R262 R263 R264 R265 R266	1-249-413-11 1-249-421-11 1-249-421-11 1-249-425-11 1-249-425-11	CARBON CARBON CARBON CARBON CARBON	470 2.2K 2.2K 4.7K 4.7K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R556 R557 R558 R559 R560	1-249-405-11 1-249-425-11 1-247-895-00 1-249-427-11 1-249-411-11	CARBON CARBON CARBON CARBON CARBON	100 4.7K 470K 6.8K 330	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R401 R402 R410 R411 R412	1-249-434-11 1-249-435-11 1-249-413-11 1-249-413-11 1-249-413-11	CARBON CARBON CARBON CARBON CARBON	27K 33K 470 470 470	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R591 R592 R593 R594 R595	1-249-427-11 1-249-429-11 1-249-429-11 1-249-424-11 1-249-417-11	CARBON CARBON CARBON CARBON CARBON	6.8K 10K 10K 3.9K 1K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R500 R501 R502 R503 R504	1-215-487-00 1-249-413-11 1-249-409-11 1-249-410-11 1-215-427-00	CARBON CARBON CARBON CARBON METAL	560K 470 220 270 1.8K	5% 5% 5% 5% 1%	1/4W 1/4W 1/4W 1/4W 1/6W		R596 R597 R598 R599 R602	1-249-425-11 1-249-425-11 1-249-405-11 1-249-405-11 1-215-901-00	CARBON CARBON CARBON CARBON METAL OX IDE	4.7K 4.7K 100 100 33K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 2W	F
R505 R506 R507 R509 R510	1-249-431-11 1-249-428-11 1-247-891-00 1-249-424-11 1-249-426-11	CARBON CARBON CARBON CARBON CARBON	15K 8.2K 330K 3.9K 5.6K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R603 R604 R605 R606 R607	1-216-359-00 1-249-414-11 1-215-469-00 1-215-440-00 1-249-434-11	METAL OXIDE CARBON METAL CARBON CARBON	6.8 560 100K 6.2K 27K	5% 5% 1% 5% 5%	1W 1/4W 1/6W 1/4W 1/4W	F
R511 R512 R513 R514 R515	1-249-429-11 1-247-891-00 1-249-429-11 1-249-409-11 1-249-423-11	CARBON CARBON CARBON CARBON CARBON	10K 330K 10K 220 3.3K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R608 R609 R610 R611 R612	1-215-901-00 1-249-401-11 1-249-385-11 1-249-385-11 1-217-193-00	METAL OXIDE CARBON CARBON CARBON WIREWOUND	33K 47 2.2 2.2 0.27	5% 5% 5% 5% 10%	2W 1/4W 1/4W 1/4W 2W	F F F
R516 R517 R518 R519 R520	1-249-408-11 1-249-429-11 1-249-437-11 1-249-433-11 1-249-411-11	CARBON CARBON CARBON CARBON CARBON	180 10K 47K 22K 330	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R613 R614 R616 R617 R618	1-249-401-11 1-205-919-11 1-249-417-11 1-249-411-11 1-218-022-51	CARBON WIREWOUND CARBON CARBON METAL OXIDE	47 220 1K 330 560	5% 10% 5% 5% 5%	1/4W 10W 1/4W 1/4W 1W	F
R521 R522 R523 R524 R525	1-249-405-11 1-215-469-00 1-249-417-11 1-249-421-11 1-249-417-11	CARBON METAL CARBON CARBON CARBON	100 100K 1K 2.2K 1K	5% 1% 5% 5% 5%	1/4W 1/6W 1/4W 1/4W 1/4W		R619 R620 R621 R622 R623	1-249-429-11 1-249-433-11 1-249-431-11 1-249-429-11 1-249-377-11	CARBON CARBON CARBON CARBON CARBON	10K 22K 15K 10K 0.47	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	F
R526 R527 R528 R529 R530	1-249-409-11 1-249-431-11 1-249-408-11 1-249-427-11 1-249-448-11	CARBON CARBON CARBON CARBON CARBON	220 15K 180 6.8K 1.2	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W	F	R624 R625 R626 R627 R628	1-249-411-11 1-218-017-51 1-249-411-11 1-218-019-51 1-249-393-11	CARBON METAL OXIDE CARBON METAL OXIDE CARBON	330 220 330 330 10	5% 5% 5% 5%	1/4W 1W 1/4W 1W 1/4W	
R531 R532 R534 R535	1-247-881-00 1-249-417-11 1-215-491-00 1-249-749-00	CARBON CARBON CARBON CARBON	120K 1K 820K 2.2M	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		R629 R630 R633 R634 R635	1-249-411-11 1-249-437-11 1-249-405-11 1-218-020-51 1-249-429-11	CARBON CARBON CARBON METAL OXIDE CARBON	330 47K 100 390 10K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1W 1/4W	
R537 R538 R539 R540	1-249-749-00 1-249-434-11 1-247-883-00 1-247-883-00 1-249-399-11	CARBON CARBON CARBON CARBON CARBON	2.2M 27K 150K 150K 33	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		 R636 R642 R643 R647 R648	1-249-429-11 1-216-343-00 1-217-192-21 1-216-485-11 1-216-485-11	CARBON METAL OXIDE WIREWOUND METAL OXIDE METAL OXIDE	10K 0.33 0.22 5.6K 5.6K	5% 5% 10% 5% 5%	1/4W 1W 2W 3W 3W	F F F
R541 R542 R543 R544 R545	1-249-438-11 1-249-425-11 1-215-088-00 1-247-745-11 1-249-433-11	CARBON CARBON METAL CARBON CARBON	56K 4.7K 2.2 330 22K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/2W 1/4W		 R649 R650 R651 R652 R802	1-249-385-11 1-249-417-11 1-249-405-11 1-215-493-00 1-249-443-11	CARBON CARBON CARBON CARBON CARBON	2.2 1K 100 1M 0.47	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	F
R546 R547 R548 R549 R550	1-249-434-11 1-249-423-11 1-216-349-00 1-215-890-11 1-249-440-11	CARBON CARBON METAL OXIDE METAL OXIDE CARBON	27K 3.3K 1 470 82K	5% 5% 5% 5% 5%	2W 1/4W	F F	 R805 R806 R807 R809 R810	1-249-448-11 1-249-439-11 1-218-025-51 1-202-821-11 1-202-818-00	CARBON CARBON METAL OXIDE SOLID SOLID	1.2 68K 1K 1.8K	5% 5% 5%	1/4W 1/4W 1W 1/2W 1/2W	
R551 R552 R553 R554 R555	1-249-749-00 1-218-026-51 1-218-025-51 1-249-411-11 1-249-749-00	CARBON METAL OX IDE METAL OX IDE CARBON CARBON	2.2M 1.2K 1K 330 2.2M	5% 5% 5% 5% 5%	1/4W 1W 1W 1/4W 1/4W		į R811	1-215-882-00 1-244-917-00 1-215-884-11 1-218-023-51 1-249-417-11	METAL OXIDE CARBON METAL OXIDE METAL OXIDE CARBON	22 68K 47 680 1K	5% 5% 5% 5%	2W 1/2W 2W 1W	F
					,								



The components identified by shading and mark $ilde{\mathbb{A}}$ are critical for safety. Replace only with part number specified.

]											
Ref.No.	Part No.	Description				Remark	Ref.No.	Part No.	Description			Remark
R820 R821 R822 R825 R826	1-249-403-11 1-247-725-11 1-217-778-11 1-216-345-11 1-249-441-11	CARBON CARBON FUS IBLE METAL OX IDE CARBON	68 10K 1K 0.47 100K	5% 5% 5% 5% 5%	1/4W 1/4W 1W 1W 1/4W	F F	C19 C20 C21 C24 C25	1-110-171-81 1-102-978-00 1-110-173-81 1-126-101-11 1-124-477-11	CERAMIC	0.047MF 220PF 0.068MF 100MF 47MF	10% 5% 10% 20% 20%	100V 50V 100V 16V 16V
R827 R828 R829 R830 R831	1-249-429-11 1-249-423-11 1-249-416-11 1-249-429-11 1-215-088-00	CARBON CARBON CARBON CARBON METAL	10K 3.3K 820 10K 2.2	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		C27 C28 C29 C51 C52	1-102-820-00 1-102-116-00 1-124-927-11 1-110-175-81 1-110-175-81	CERAMIC ELECT MYLAR	330 PF 680 PF 4.7MF 0.1MF	5% 10% 20% 10% 10%	50V 50V 50V 100V
R1001 R1002 R1004 R1006 R1007	1-249-421-11 1-249-423-11 1-249-408-11 1-249-408-11 1-249-408-11	CARBON CARBON CARBON CARBON CARBON	2.2K 3.3K 180 180 180	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		C53 C54 C55 C55 C56 C57	1-110-175-81 1-110-175-81 1-110-175-81 1-110-175-81 1-102-074-00	MYLAR MYLAR MYLAR	0.1MF 0.1MF 0.1MF 0.1MF 0.001MF	10% 10% 10% 10% 10%	100V 100V 100V 100V 50V
	1-249-429-11 1-249-417-11 1-249-389-11 1-215-493-00	CARBON CARBON CARBON CARBON	10K 1K 4.7 1M	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		C58 C59 	1-102-074-00 1-102-074-00		0.001MF 0.001MF	10% 10%	50 V 50 V
R5505	1-249-393-11	CARBON	10	5%	1/4W		[]		FILM			
	-	IABLE RESISTO	-				CP01 CP02	1-235-977-11 1-235-977-11	NETWORK, RES			
	1-228-991-00 1-230-630-11								TRIMMER			
	1-228-990-00						CT01	1-141-181-11				
	SPΔ	RK GAP					, , , , , , , , , , , , , , , , , , , ,					
56801	1-519-063-XX		2A D				İ		DIODE			
30001	1-319-003-	DISCHARGING	an r				D01 D02	8-719-109-89	DIODE RD5.6E	S-82		
	TRA	NSFORMER					D03	8-719-911-19				
T601 ♠	1-448-961-11	SLR.T					D04 D07					
T 602 A T801	T602 A 1-424-011-11 TRANSFORMER, PULSE T801 1-437-090-00 HDT							8-719-109-96	DI00E RD6.8ES-81			
	TER	MINAL PIN						<u>IC</u>				
TP91	*1-535-084-00	1P TERMINAL I	PIN				 ICO1	8-759-972-41	IC SAA5243E			
*****	*****	*****	*****	****	*****	*****	ICO2 ICO3 ICO4	8-759-972-96 8-759-946-85 8-759-113-01				
•	*A-1347-014-A	V BOARD, COMP					1001	0-705-115-01				
								<u>C01</u>	<u>L</u>			
	CAP	ACITOR					L01 L02	1-408-411-00 1-410-468-11	INDUCTOR INDUCTOR	15UH 6.8UH		
C01 C02	1-126-101-11 1-124-120-11	EL ECT EL ECT	100MF 220MF		20% 20%	16V 16V	L03	1-410-468-11 1-410-468-11	INDUCTOR INDUCTOR	6.8UH 6.8UH		
C03 C04	1-124-119-00	EL ECT EL ECT	330MF		20%	16V	L05	1-410-468-11	INDUCTOR	6.8UH		
C05	1-126-101-11	ELECT	47MF 100MF		20% 20%	16V 16V	L06	1-410-468-11	INDUCTOR	6.8UH		
C06 C07 C08	1-124-120-11 1-124-499-11 1-102-951-00	ELECT ELECT CERAMIC	220MF 1MF 15PF		20% 20% 5%	16 V 50 V 50 V	 	TRA	NSISTOR			
C09 C10	1-102-074-00 1-102-824-00	CERAMIC CERAMIC	0.001M 470PF	F	10% 5%	50V 50V	001	8-729-904-27	TRANSISTOR 2 TRANSISTOR 2			
C11	1-110-182-81	MYLAR	0.022M	F	10%	250V	Q02 Q03 Q04	Q03 8-729-900-80 TR		TC114ES		
C12 C13	1-102-980-00 1-102-973-00	102-980-00 CERAMIC 270PF	•	5% 5%	50V 50V	Q04 Q05	8-729-178-54 8-729-177-43	TRANSISTOR 2 TRANSISTOR 2				
C14 C15	1-102-951-00	CERAMIC		5%	50 V	 Q06	8-729-178-54	TRANSISTOR 2				
C16	1-102-961-00	CERAMIC	27PF		5%	50V	Q07 Q09	8-729-178-54 8-729-117-54	TRANSISTOR 2 TRANSISTOR 2	SA1175		
C17	1-110-190-81	MYLAR	0.01MF 0.047M		10% 10%	400V 100V	Q10 Q11	8-729-117-54 8-729-117-54	TRANSISTOR 2 TRANSISTOR 2			
C18	1-102-953-00	CERAMIC	18PF		5%	50V	l					



Ref.No. Part No.	Description				Remark	Ref.No.	Part No.	Description			Remark
R01 1-215-867-00 R02 1-249-425-11 R04 1-215-867-00 R05 1-215-128-00	METAL OXIDE CARBON METAL OXIDE METAL	470 4.7K 470 100	5% 5% 5% 5%	1W 1/4W 1W 1/4W	F F	C1407 C1408 C1409	1-124-902-00 1-124-477-11 1-126-101-11 1-124-908-11 1-123-875-11	ELECT ELECT ELECT ELECT ELECT	0.47MF 47MF 100MF 22MF 10MF	20% 20% 20% 20% 20%	50V 16V 16V 50V 50V
R06 1-249-417-11 R07 1-249-405-11 R08 1-249-411-11 R09 1-249-438-11	CARBON CARBON CARBON CARBON CARBON	1K 100 330 56K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		C1412 C1413 C1414	1-123-875-11 1-124-477-11 1-124-477-11 1-123-875-11 1-124-902-00	ELECT ELECT ELECT ELECT ELECT	10MF 47MF 47MF 10MF 0.47MF	20% 20% 20% 20% 20%	50V 16V 16V 50V 50V
R13 1-249-405-11 R14 1-249-405-11	CARBON CARBON	100	5% 5%	1/4W 1/4W		C1417	1-124-902-00 1-124-120-11	ELECT ELECT	0.47MF 220MF	20% 20%	50V 16V
R15 1-215-493-00 R16 1-249-420-11 R17 1-249-417-11 R18 1-249-425-11 R19 1-249-411-11	CARBON CARBON CARBON CARBON CARBON	1M 1.8K 1K 4.7K 330	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		C1419 C1421	1-102-112-00 1-102-112-00 1-124-477-11 1-110-182-81	CERAMIC CERAMIC ELECT MYLAR	330 PF 330 PF 47MF	10% 10% 20%	50V 50V 16V
R20 1-215-146-00 R27 1-249-399-11 R28 1-249-399-11 R29 1-249-399-11		560 33 33 33	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		C1424 C1425 C1426 C1427	1-110-182-81 1-124-902-00 1-124-902-00 1-101-003-00	MYLAR ELECT ELECT CERAMIC	0.022MF 0.47MF 0.47MF 0.0047MF	10% 20% 20%	250V 50V 50V 50V
R30 1-215-130-00 R31 1-215-130-00 R32 1-215-130-00 R33 1-249-404-00	METAL METAL CARBON	120 120 120 82	5% 5% 5%	1/4W 1/4W 1/4W 1/4W		C1429 C1430 C1431	1-101-003-00 1-101-003-00 1-102-112-00 1-124-902-00 1-124-902-00	CERAMIC CERAMIC CERAMIC ELECT ELECT	0.0047MF 0.0047MF 330PF 0.47MF 0.47MF	10% 20% 20%	50V 50V 50V 50V 50V
R34 1-249-417-11 R37 1-249-405-11 R38 1-249-416-11 R40 1-249-425-11 R41 1-249-413-11 R43 1-249-425-11	CARBON	1K 100 820 4.7K 470 4.7K	5%	1/4W 1/4W 1/4W 1/4W 1/4W 1/4W		C1437 C1501 C1502	1-126-101-11 1-102-074-00 1-102-074-00 1-123-875-11 1-123-875-11 1-108-614-91	ELECT CERAMIC CERAMIC ELECT ELECT MYLAR	100MF 0.001MF 0.001MF 10MF 10MF 0.001MF	20% 10% 10% 20% 20% 10%	16V 50V 50V 50V 50V 100V
R44 1-249-413-11 R45 1-215-152-00	CARBON	470 1K	5% 5%	1/4W 1/4W		C1504	1-124-910-11	ELECT	47MF	20%	50V
R46 1-247-779-00	CARBON	6.8	5%	1/4W		C1507 C1508 C1509	1-108-620-91 1-123-875-11 1-124-499-11	MYLAR ELECT ELECT	0.0033MF 10MF 1MF	10% 20% 20%	100V 50V 50V
VARIABLE RESISTOR					İ	1-123-875-11 1-110-188-81	ELECT	10MF 0.0068MF	20%	50V 400V	
	RVO1 1-230-624-51 RES, ADJ, CARBON 220 CONNECTOR					C1513 C1514	1-110-188-81 1-102-963-00 1-110-183-81 1-102-117-00	MYLAR CERAMIC MYLAR CERAMIC	33PF 0.027MF 820PF	5% 10% 10%	50V 250V 50V
V1 *1-560-123-00	PLUG, CONNEC					1					
V4 *1-560-123-00	PLUG, CONNEC	TOR (2.	.5MM) 6	6P ITCH)		CONNECTOR CN1401 1-536-996-11 TERMINAL BOARD, INPUT/OU CN1402 1-561-534-41 SOCKET 21P CN1403 1-561-534-41 SOCKET 21P CNJ25 *1-564-892-41 PLUG, CONNECTOR 3P CNJ41 *1-566-641-11 CONNECTOR, HINGE (TAB) 1				TPUT	
V6 *1-508-784-00		TON (Z.	, Shirt T	110117						8P	
CF	YSTAL						*1-564-893-11	PLUG, CONNEC			
X01 1-567-162-00 X02 1-567-495-11 X03 1-567-686-11	OSCILLATOR, OSCILLATOR,	CRYSTAI CERAMI	Ċ			CNJ51 CNJ67 CNJ142	CNJ45 *1-564-894-11				
****************						į	DIO	DE			
*A-1371-373-A	J1 BOARD, CO						8-719-110-04	DIODE RD7.5E	S-B3		
CA	PACITOR					D1404	8-719-110-04 8-719-110-04	DIODE RD7.5E	S-83		
C1401 1-123-875-11 C1402 1-126-103-11 C1403 1-102-112-00 C1404 1-124-902-00 C1405 1-101-003-00	ELECT CERAMIC ELECT	10MF 470MF 330PF 0.47MI 0.0047	F	20% 20% 10% 20%	50V 16V 50V 50V 50V	D1406 D1407 D1408 D1409 D1410	8-719-110-04 8-719-110-04 8-719-110-18 8-719-110-14 8-719-110-04 8-719-110-04 8-719-110-04	DIODE RD7.5E DIODE RD10ES DIODE RD9.1E DIODE RD7.5E DIODE RD7.5E DIODE RD7.5E DIODE RD7.5E	S-83 -83 S-83 S-83 S-83		
						1					

J1	J2

Ref.No. Part N	o. Descript	ion		Remark	Ref.No.	Part No.	Descriptio	n			Remark
D1418 8-719- D1419 8-719- D1420 8-719- D1501 8-719- D1502 8-719-	110-04 DIODE RD 110-04 DIODE RD 912-20 DIODE 1S	7.5ES-B3 7.5ES-B3 S120			R1447 R1448 R1450	1-249-440-11 1-249-409-11 1-249-409-11 1-249-413-11 1-249-413-11	CARBON CARBON	82K 220 220 470 470	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
D1503 8-719- D1504 8-719- D1505 8-719- D1506 8-719- D1507 8-719-	911-19 DIODE 1S 000-12 DIODE MC 110-85 DIODE RD	S119 931 36ES-84			R1453	1-249-412-11 1-249-412-11 1-247-703-11 1-247-703-11	CARBON CARBON METAL METAL	390 390 180 180	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
IC1401 8-752- IC1402 8-759- IC1501 8-759-	<u>IC</u> 032-27 IC CXA111 046-32 IC TEA201 042-16 IC TEA203	14A			R1502 R1503 R1504 R1505	1-249-433-11 1-249-434-11 1-247-895-00 1-249-435-11 1-249-433-11	CARBON CARBON CARBON CARBON CARBON CARBON	22K 27K 470K 33K 22K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
	TRANSISTOR				R1509 R1510	1-247-887-00 1-249-426-11 1-249-417-11	CARBON CARBON CARBON	220K	5% 5% 5%	1/4W 1/4W 1/4W	
Q1401 8-729-1 Q1402 8-729-1	17-54 TRANSISTO	OR 2SA1175 OR 2SA1175			R1512 	1-249-429-11	CARBON	10K	5%	1/4W	
	RESISTOR			İ	R1514 R1515 R1516	1-249-417-11 1-215-489-00 1-249-432-11 1-249-410-11	CARBON CARBON CARBON CARBON	1K 680K 18K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
R1401 1-249-4 R1402 1-247-6 R1403 1-249-4 R1404 1-249-4 R1405 1-249-4	98-11 CARBON 37-11 CARBON 13-11 CARBON 29-11 CARBON	82 5% 68 5% 47K 5% 470 5% 10K 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R1518 R1519 R1520 R1521	1-249-429-11 1-247-883-00 1-247-895-00 1-249-425-11 1-249-426-11	CARBON CARBON CARBON CARBON	10K 150K 470K 4.7K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
R1407 1-247-8 R1408 1-249-4 R1409 1-249-4 R1410 1-249-4 R1411 1-249-4	34-11 CARBON 13-11 CARBON 34-11 CARBON	470K 5% 27K 5% 470 5% 27K 5% 470 5%	1/4W 1/4W 1/4W 1/4W 1/4W				CARBON TABLE RESIST RES, ADJ, C	OR	5 %	1/4W	
R1412 1-249-4 R1413 1-247-8 R1414 1-249-4 R1415 1-249-4 R1416 1-249-4	37-11 CARBON 95-00 CARBON 37-11 CARBON 34-11 CARBON	47K 5% 470K 5% 47K 5% 27K 5% 27K 5%	1/4W 1/4W 1/4W 1/4W 1/4W	 	RV1502 RV1503 RV1504 RV1505	1-228-994-00 1-228-995-00 1-228-990-00 1-228-999-00	RES, ADJ, C RES, ADJ, C RES, ADJ, C RES, ADJ, C	ARBON 10K ARBON 22K ARBON 1K ARBON 470			
R1417 1-249-4 R1418 1-247-7 R1419 1-249-4 R1420 1-249-4 R1422 1-249-4	04-00 CARBON 38-11 CARBON 09-11 CARBON	82 5% 82 5% 220 5% 220 5% 1K 5%	1/4W 1/2W F 1/4W 1/4W 1/4W	i	RV1507 RV1508 RV1509	1-230-504-11 1-228-994-00 1-228-999-00	RES, ADJ, C RES, ADJ, C RES, ADJ, C RES, ADJ, C	ARBON 220 ARBON 10K ARBON 470		*****	*****
R1423 1-249-4 R1424 1-249-4 R1425 1-249-4 R1426 1-249-4	34-11 CARBON 34-11 CARBON 17-11 CARBON	27K 5% 27K 5% 1K 5%	1/4W 1/4W 1/4W		*	1-625-205-11	*****				
R1427 1-249-4	17-11 CARBON	1K 5% 1K 5%	1/4W 1/4W		C1401	<u>CAP.</u> 1-126-105-11	ACITOR	10000=			
R1428 1-247-8 R1429 1-247-8 R1430 1-249-4 R1433 1-249-4 R1434 1-249-3	95-00 CARBON 04-00 CARBON 09-11 CARBON	470K 5% 470K 5% 82 5% 220 5% 10 5%	1/4W 1/4W 1/4W 1/4W 1/4W F	 	C1402	1-126-105-11	ELECT	1000MF 1000MF			35 V 35 V
R1437 1-249-4; R1440 1-249-4; R1441 1-249-4; R1442 1-249-4; R1443 1-249-4;	29-11 CARBON 5-11 CARBON 5-11 CARBON 37-11 CARBON	10K 5% 680 5% 680 5% 47K 5%	1/4W 1/4W 1/4W 1/4W	1	CNJ23 * CNJ242*	1-564-893-11 1-564-893-11 JACK	PLUG, CONNEC	CTOR 4P			
R1443 1-249-4; R1444 1-249-4		47K 5% 220 5%	1/4W 1/4W		J1401	1-507-806-00	-				
			,	į		RESI	STOR				
				 - -	R1401 1 R1402 1	l-215-144-00 l-215-144-00	MFTAI	470 55 470 55		1/4W 1/4W	

Н3	H4	KS
110		170

							L					_
Ref.No. Part No.	Description			Remark	Ref.No.	Part No.	Description				Remar	<u>'k</u>
*1-625-201-11 CON	H3 BOARD *******				C207 C213 C214 C217 C218	1-124-927-11 1-124-908-11 1-110-188-81 1-110-188-81 1-110-182-81	ELECT MYLAR MYLAR	4.7MF 22MF 0.0068M 0.0068M 0.022MF	F F	20% 20% 10% 10%	50V 50V 400V 400V 250V	
CNH302*1-564-898-11 CNH303*1-564-892-41	PLUG, CONNEC				C219 C220 C221 C222 C223	1-110-182-81 1-108-620-91 1-108-620-91 1-110-182-81 1-110-182-81	MYLAR MYLAR	0.022MF 0.0033M 0.0033M 0.022MF 0.022MF	F F	10% 10% 10% 10%	250V 100V 100V 250V 250V	
D1405 8-719-812-41 *4-348-208-00	HOLDER, LED;				C224 C225 C226 C227	1-110-190-81 1-136-173-00 1-136-173-00 1-110-182-81	FILM FILM MYLAR	0.01MF 0.47MF 0.47MF 0.022MF		10% 5% 5% 10%	400V 50V 50V 250V	
SWI	TCH				C228	1-110-184-81	MYLAR	0.033MF		10%	250V	
\$1401 1-571-085-21 \$1402 1-571-085-21 \$1403 1-571-085-21 \$1404 1-571-085-21 \$1405 1-571-085-21	SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT	ICLE ICLE			C229 C230 C231 C232 C233	1-110-192-81 1-110-192-81 1-124-902-00 1-123-875-11 1-102-114-00	MYLAR ELECT ELECT	0.015MF 0.015MF 0.47MF 10MF 470PF		10% 10% 20% 20% 10%	400V 400V 50V 50V 50V	
\$1406 1-571-085-21 \$1407 1-571-085-21 \$1408 1-571-085-21 \$1409 1-571-085-21 \$1410 1-571-085-21	SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT	ICLE ICLE			C234 C235 C236 C237 C238	1-102-114-00 1-102-114-00 1-102-114-00 1-124-902-00 1-102-978-00	CERAMIC	470PF 470PF 470PF 0.47MF 220PF		10% 10% 10% 20% 5%	50V 50V 50V 50V 50V	
\$1411 1-571-085-21 \$1412 1-571-085-21	SWITCH, TACT SWITCH, TACT	ICLE			 C239 	1-126-103-11	ELECT	470MF		20%	16V	
S1414 1-571-085-21 SWITCH, TACTICLE					 	CON	NECTOR					
******	*****	******	*****	*****] CNK21 :	*1-562-370-21	CONNECTOR. B	OARD TO	BOARD	18P		
*1-625-202-11	H4 BOARD					*1-564-880-31			DOMINO	20,		
*4-387-825-01	HOLDER, LED					010	DE					
CON	NECTOR				D201 D202 D205	8-719-110-14 8-719-110-14 8-719-110-04	DIODE RD9.18	S-B3				
CNH401*1-564-884-11 CNH403*1-564-880-31					D205							
D.I.O.	nr				<u> </u>	<u>1C</u>						
D1401 8-719-101-08	DIODE SRIOSD				1C201	8-759-013-17	IC TDA6200					
*4-387-801-01 01402	HOLDER, LED; DIODE SRIOSD)			TRANSISTOR							
*4-387-801-01 D1403	HOLDER, LED; DIODE SRIOSD)			Q201 Q202		TRANSISTOR 2SC2785 TRANSISTOR 2SC2785					
~4-38/-801-01	HOLDER, LED;	01403				DEC	10700					
<u>IC</u>							ISTOR					
IC1401 8-741-138-70	IC BX-1387				R201	1-249-441-11	CARBON CARBON		5%	1/4W 1/4W		
******	******	*****	*****	******	R203	1-249-441-11	CARBON CARBON	33K	5% 5%	1/4W 1/4W		
*1-625-206-11	KS BOARD				R205 R206	1-249-435-11	CARBON	3.3K	5% 5%	1/4W 1/4W		
CAP	ACITOR				R207	1-249-423-11 1-249-431-11	CARBON CARBON	15K	5% 5%	1/4W 1/4W		
C202 1-124-902-00 C203 1-124-477-11	ELECT ELECT	0.47MF 47MF	20% 20%	50V 16V	R209 R210 	1-249-433-11 1-249-431-11	CARBON CARBON		5% 5%	1/4W 1/4W		
C204 1-124-902-00 C205 1-124-927-11 C206 1-124-477-11	ELECT ELECT ELECT	0.47MF 4.7MF 47MF	20% 20% 20%	50V 50V 16V	R211 R212 R213 R214 R215	1-249-441-11 1-249-433-11 1-249-431-11 1-249-417-11 1-249-433-11	CARBON CARBON CARBON CARBON CARBON	22K 15K 1K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		



The components identified by shading and mark A are critical for safety.

Replace only with part number specified.

Ref.No.	Part No.	Description				Remark
R216 R217 R218 R219	1-249-433-11 1-249-431-11 1-249-417-11 1-249-429-11	CARBON CARBON CARBON CARBON	22K 15K 1K 10K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
R220	1-249-425-11	CARBON	4.7K	5%	1/4W	
R221 R222 R223 R224 R225	1-249-417-11 1-249-417-11 1-249-413-11 1-249-413-11 1-249-417-11	CARBON CARBON CARBON CARBON CARBON	1K 1K 470 470 1K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R226 R227 R228 R229 R230	1-249-417-11 1-249-417-11 1-249-417-11 1-249-441-11 1-249-441-11	CARBON CARBON CARBON CARBON CARBON	1K 1K 1K 100K 100K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	

MISCELLANEOUS

A 1-451-311-21 DEFLECTION YOKE (SY-153E)
1-452-032-00 MAGNET, DISK; 10MM &
1-452-094-00 MAGNET, ROTATABLE DISK; 15MM &
1-503-642-21 SPEAKER
1563-130-00 CORE BING

1-543-179-00 CORE, RING

△1-559-346-11 CORD, POWER (WITH CONNECTOR)

L901 & 1-426-325-11 COIL, DEMAGNETIZATION T802 & 1-439-416-11 TRANSFORMER ASSY, FLYBACK V901 & 8-733-224-05 PICTURE TUBE (A59JWC60X)

ACCESSORIES AND PACKING MATERIALS

Part No.	Description
A-1470-844-A *4-381-155-01 *4-387-845-01 *4-387-846-01 *4-387-847-01	COMMANDER ASSY (RM-673) BAG, PROTECTION CUSHION (UPPER) (ASSY) CUSHION (LOWER) (ASSY) INDIVIDUAL CARTON
4-482-524-71	MANUAL, INSTRUCTION

Remark